Service Manual

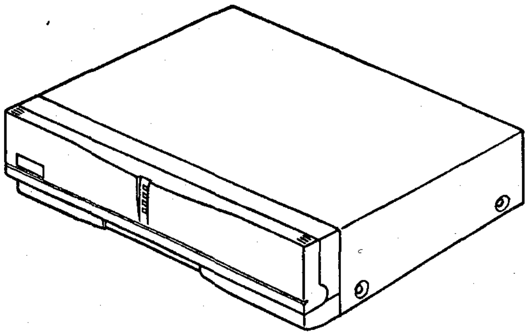
Operating Instructions
Disassembly Procedures
Electrical Adjustment
Block / Schematic / Circuit Board Diagram
Exploded Views & Replacement Parts List

S VHS 625 VHS PAL Hi-Fi

Video Cassette Recorder

AG-4700E
AG-4700B

K-MECHANISM



The mechanical chassis of this model is K Mechanical Chassis. Therefore refer to the Service Manual for K Mechanism. (Order No. VSD9402M632)

SPECIFICATIONS

ITEM	SPECIFICATION	
POWER	Source : 220 ~ 240V AC, 50 ~ 60Hz Consumption : 40 Watts	
RECORDING & TELEVISION SYSTEM	2 rotary heads, helical scanning system	
	CCIR 625 lines, 50 fields, PAL colour signal	
RF MODULATED	AG-4700E	UHF channel 36 ± 4, 75 Ω terminated
	AG-4700B	UHF channel 36 ± 6, 75 Ω terminated
VIDEO	HEADS	4 heads
	INPUT	EURO AV(AV1 ⁄ AV2) (21 pin) 1.0 Vp-p, 75 Ω terminated VIDEO IN(AV3) (PHONO) 1.0 Vp-p, 75 Ω terminated S-VIDEO IN Y : 1.0 Vp-p, 75 Ω terminated C : 0.3 Vp-p, 75 Ω terminated
	OUTPUT	EURO AV(AV1 ⁄ AV2) (21 pin) 1.0 Vp-p, 75 Ω terminated VIDEO IN(AV3) (PHONO) 1.0 Vp-p, 75 Ω terminated S-VIDEO IN Y : 1.0 Vp-p, 75 Ω terminated C : 0.3 Vp-p, 75 Ω terminated
	Horizontal Resolution (colour)	VHS : more than 240 lines(SP) S-VHS : more than 400 lines(SP, S-VIDEO Socket)
	S⁄ N ration	VHS : more than 43 dB(SP,colour)

ITEM	SPRCIFICATION	
AUDIO	HEADS	1 stationary head(normal) 2 rotary heads(Hi-Fi)
	TRACK	1 track(normal, mono) 2 channels(Hi-Fi, stereo)
	INPUT	EURO AV(AV1 ⁄ AV2) (21 pin) − 6 dBV, more than 10 kΩ AUDIO IN(AV3) (PHONO) − 10 dBV, more than 47 kΩ MIC(M3) − 70 dBV
	OUTPUT	EURO AV(AV1 ⁄ AV2) (21 pin) − 6 dBV, less than 1 kΩ AUDIO IN(AV3) (PHONO) − 8 dBV, less than 1 kΩ HEADPHONES(M3) − 30 dBV, 8 Ω
	Dynamic Range : more than 90 dB (Hi-Fi) Frequency Response : 20 Hz~ 20 kHz (Hi-Fi) Wow and Flutter : 0.005 % Wrms (Hi-Fi)	
TAPE SPEED	SP : 23.39 mm⁄ sec. LP : 11.7 mm⁄ sec. Recording Time : 520 min. with NV-SE260 (LP mode) 260 min. with NV-SE260 (SP mode)	
TAPE FORMAT	S-VHS⁄ VHS	
OPERATING CONDITION	Temperature : 5 ℃ ~ 40 ℃	
	Humidity : 35 % ~ 80 %	
DIMENSIONS	430 (W) × 118 (H) × 395 (D) mm	
WEIGHT	7.0 kg	

Panasonic

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

INTRODUCTION

This service manual contains the technical information which service personnel to understand and service the Panasonic VCR model AG-4700.
Please use this service manual together with the Service Manual for mechanical adjustments and maintenance procedures of K-Mechanism (Order No. VSD6402M632).

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SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing observe the original lead dress. If a short circuit is found, replac all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protectiv devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs onthe plug.
2. Measur the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwhead connectors, contrl shafts, etc. When the exposed metallic part has a return path to the chassis, the reading shoulb be between 1MΩ and 5.2MΩ.
   When the exposed metal dose not have a return path to the chassis, the reading must be ∞.

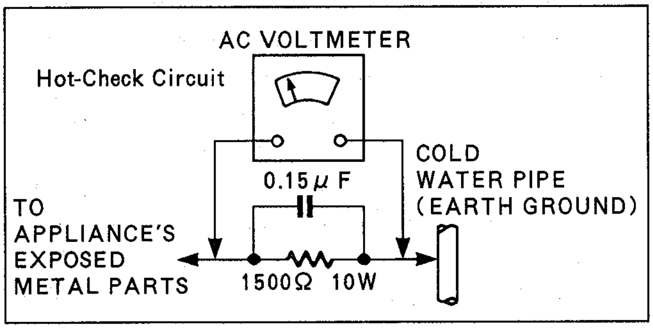


Figure 1

LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.
   Do not use an isolation transformer for this check.
2. Connect a 1.5KΩ, 10W resistor, inparallel with 0.15μF capacitor, between each exposed metallic part on the set an a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measur the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliamp. In case a measurement is outside of the limits specified, there is a possiblity of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ELECTROSTATICALLY SENSITIVE(ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.
   Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package untilimmediately before you are ready to install it. (most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION: Be sure no power is applied to the chassis or circuit, and observe all otner asfety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devoces. (Otherwise harmless mother such as the brushing together of your clothes fabric or the lifting of your foor from a carpeted floor can generate static electricity sufficient to damage an ES device).

SECTION 1
GENERAL DESCRIPTIONS

1-1. SERVICE INFORMATION

1-1-1. K-MECHANISM INFORMATION

A. SERVICE POSITION

When servicing the K-Mechanism, the Mechanism can easily be fixed by standing the Mechanism up in the Main Frame as shown below to check easily.

In this position, the following services are possible.

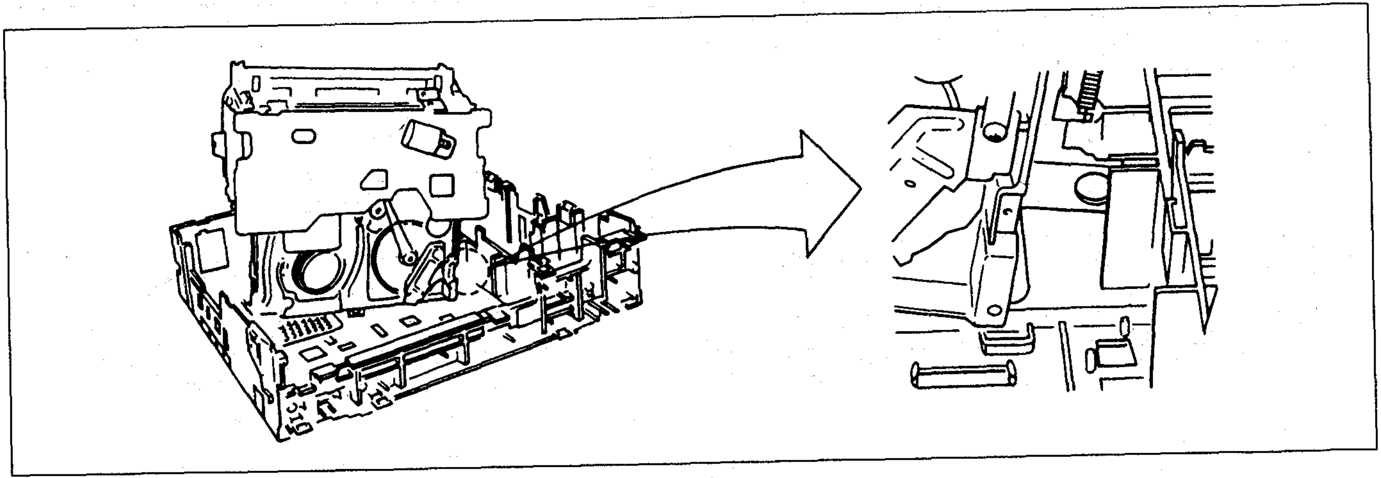


Fig. S1

A-1. CHECKING OF GEAR PHASE ALIGNMENT CONDITION

1) Remove the Mechanism Connection C.B.A.
2) Check gear phase Alignment Condition of Mechanism described on the bottom side of Frame.

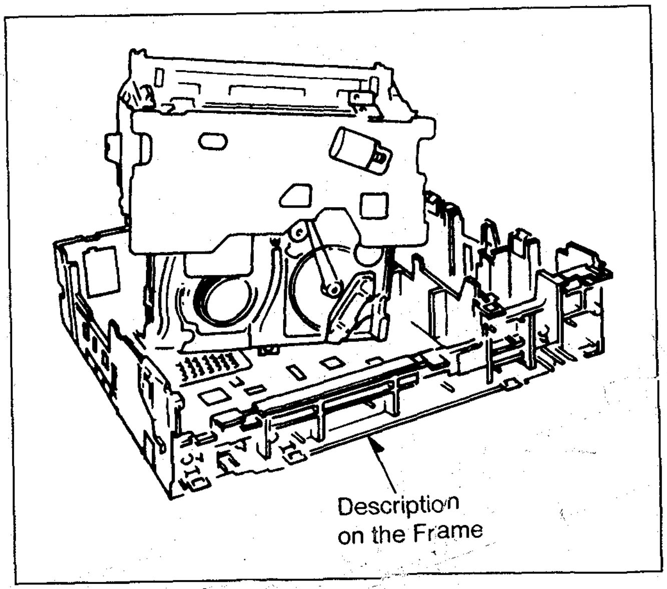


Fig. S2

A-2. CHECKING OF LOADING/UNLOADING OPERATION

There are 3 methods for manual operation of loading/unloading operation as follows.

1. HAND OPERATION
   1) Remove the Mechanism Connection C.B.A.
   2) Turn the Worm Gear or the WORM WHEEL GEAR (Remove the Loading Motor Unit) manually.
2. BATTERY OPERATION
   1) Remove the Mechanism Connection C.B.A.
   2) Connect the Battery (Manganes-Type R6 (AA) 3pcs./+4.5V) to the Loading Motor terminals.
3. SERVICE INFORMATION DISPLAY OPERATION
   1) Set the Service Information Display mode. (Press the "FF", "REW" and "EJECT" buttons simultaneously.)
   2) Press the "FF", "REW" and "EJECT" buttons 7 times to set the Service Mode 7. (The end of display on the Display becomes "--".)
   3) In the above Service Information Display mode, the Loading Motor rotates for Loading operation when the "PLAY" button is pressed.
      The Loading Motor rotates for unloading operation when the "STOP" button is pressed.

Remark:
Use the "SERVICE INFORMATION DISPLAY" mode for a final check of mechanism movement.

A-3. CHECKING OF REEL GEARS OPERATION

1) Remove the Mechanism Connection C.B.A.
2) Move the mechanism to "PLAY" position by loading operation. (Refer to <A-2>)
3) Turn the "Rotor Unit" to check movement of reel gears.

B. CYLINDER UNIT REPLACEMENT

The Cylinder Unit can be replaced easily by the following method.

1) Remove the Top Panel.
2) Remove the 3 screws of the Cylinder Unit with a magnetized screw driver through the holes on the Bottom Plate as shown in Fig. S3.

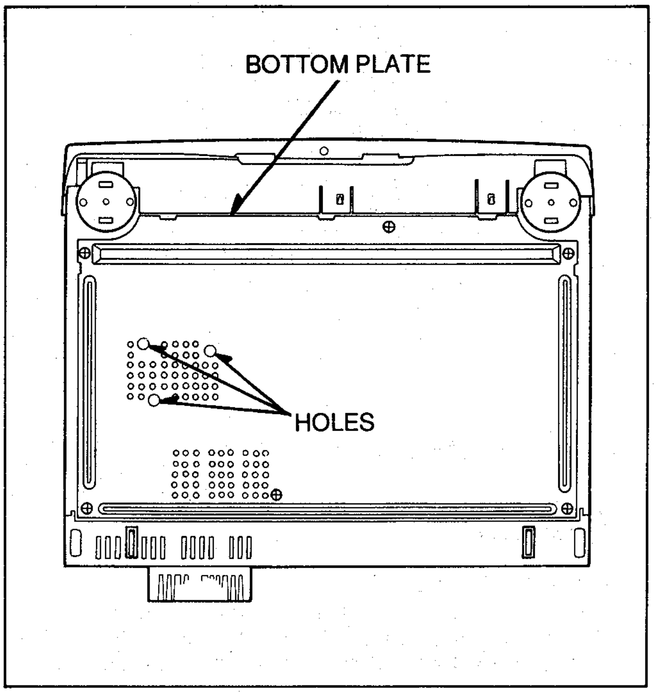

BOTTOM PLATE
HOLES

Fig. S3

C. CAPSTAN STATOR UNIT ASSEMBLY

When replacing the CAPSTAN STATOR UNIT, the CENTRE FIXING TOOL (VFK0851) must be used to fix the centre of CAPSTAN STATOR UNIT.

Method:

1) Place the CAPSTAN STATOR UNIT into position.
2) Loosely tighten the 3 screws.
3) Insert the CENTRE FIXING TOOL (VFK0851) as shown in Fig. S4.
4) Tighten the 3 screws.
5) Remove the CENTRE FIXING TOOL.

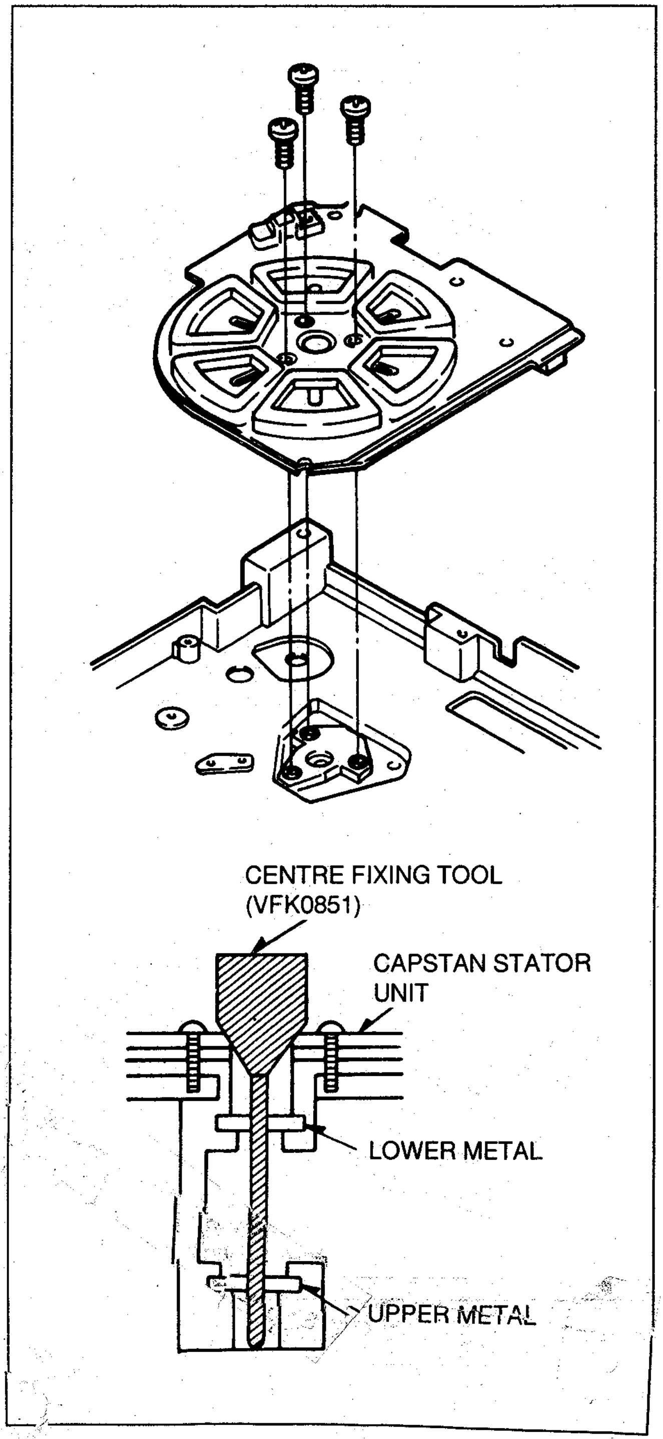

CENTRE FIXING TOOL
(VFK0851)
CAPSTAN STATOR UNIT
LOWER METAL
UPPER METAL

Fig. S4

D. EJECT OPERATION

The main cam gear rotates in the direction of the arrow. The projection (B) of the carriage connection gear engages with the recession (A) of the main cam gear. The carriage connection gear rotates in the direction of the arrow to perform the Eject operation.

<NOTE>
If the Eject operation is performed without the cassette carriage installed while repairing or making the mechanical phase alignment, the main cam gear will not engage with the carriage connection gear and will not rotate.
To perform the Eject operation with the cassette carriage not installed, it is necessary to rotate the carriage connection gear by hand in the direction of the arrow.

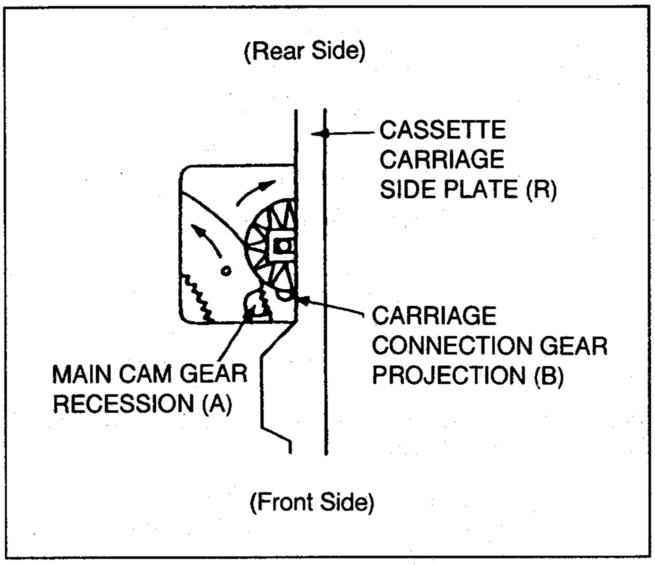

(Rear Side)
CASSETTE CARRIAGE SIDE PLATE (R)
CARRIAGE CONNECTION GEAR PROJECTION (B)
MAIN CAM GEAR RECESSION (A)
(Front Side)

Fig. S5 Top View of Eject Operation

E. TAKE-UP PHOTO SENSOR OPERATION

Note the following matters for Take-up Photo Sensor Operation.

1) While servicing of the K-Mechanism, the unit will not operate properly if a strong light (ex, Fluorescent light, Spot light) falls on the Take-up Photo Sensor. In this case, cover the Take-up Photo Sensor to prevent the light from falling on it.
2) While servicing of the K-Mechanism with "Power On" and without cassette tape inserted, the Unit does not operate properly.

F. POWER TRANSISTOR SERVICING

When removing the connector of the Power Transistor, hold the Power Transistor by hand to prevent damage.

1-1-2. REMOVAL OF THE CASSETTE TAPE

If the electrical circuit is defective and the action of unloading and front unloading do not work properly, it is possible to remove the cassette manually. There are 2 methods of removing the cassette.

1. HAND OPERATION

1) Remove the bottom plate.
2) Turn the WORM GEAR to "A" arrow mark direction manually as shown in Fig. S6, moving the LOADING POST to the unloaded position.
3) Turn the CAPSTAN clockwise to take up the tape.
4) **Turn the WORM GEAR again to eject the cassette.**

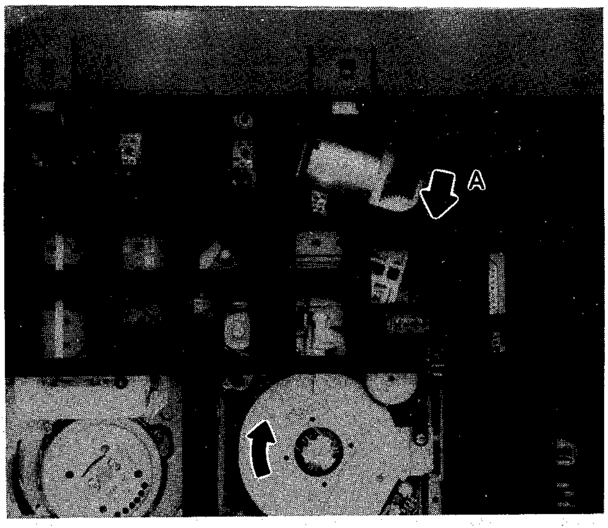


Fig. S6

2. BATTERY OPERATION

1) Connect the Battery (Manganes-Type R6 (AA) 3pcs./ +4.5V) to P1503 as shown in Fig. S7.
2) After moving the LOADING POST to the unloaded position, disconnect the battery to stop the motor.
3) Turn the CAPSTAN to clockwise to take up the tape.
4) Reconnect the battery to eject the cassette.

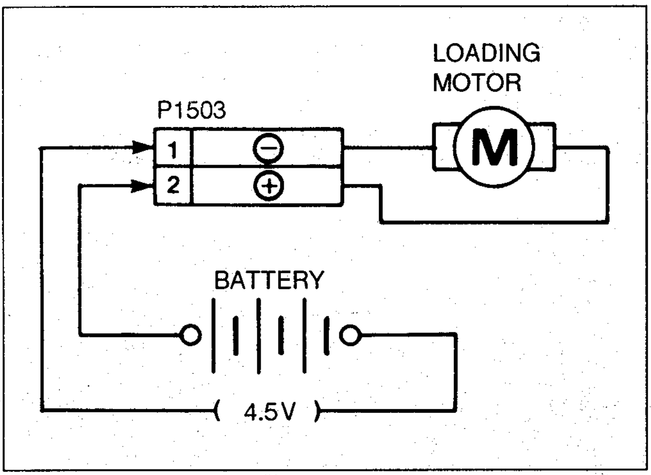


Fig. S7

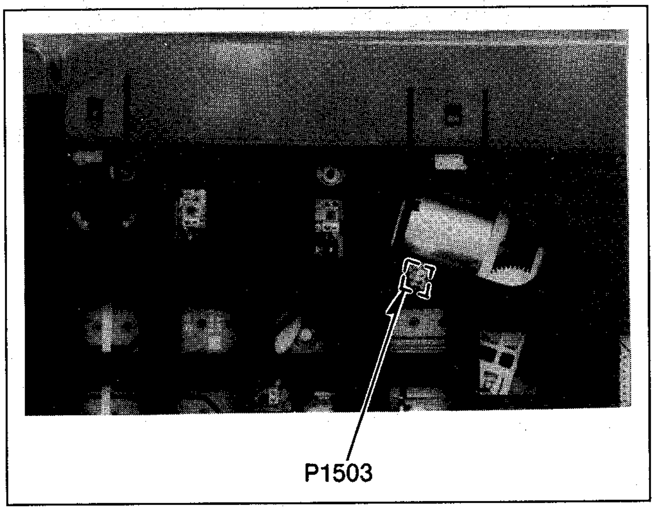


Fig. S8

If the cassette tape can not be removed by the above 2 methods, remove it by the following method.

1) Remove the Top Panel.
2) Remove the Front Panel Unit.
3) Lift up the Pinch Arm after removing spring.
4) Push the P5 Arm and remove the cassette tape from tape transportation (P1, P2, P3 and P5 Posts).
5) Turn the Capstan Motor to take up the tape.
6) Remove 1 screw from the Side Plate (R) Unit to disconnect the Rack Gear from the Carriage Connection Gear.
7) Take out the cassette tape from the Cassette Compartment.

1-1-3. FLAT CARD CABLE INSTLLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

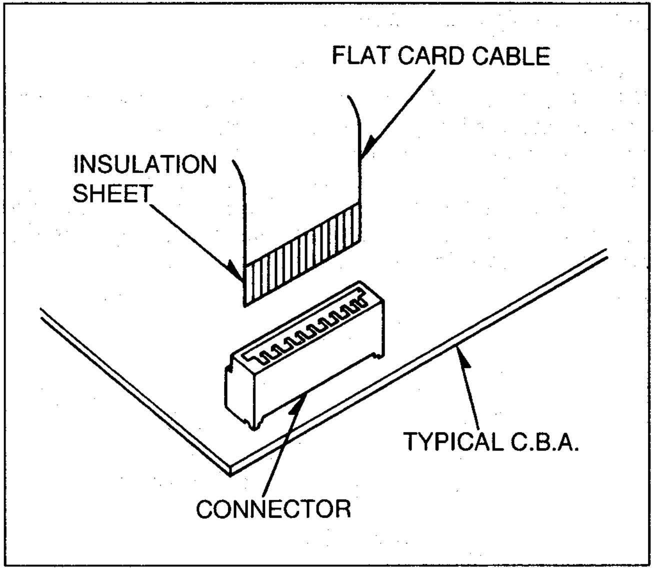


Fig. S9

1-1-4. CHANNEL MEMORY IC INITIALIZATION

When replacing the channel memory IC7503 (XLJ9021B), its IC should be initialized.

Note:1) It should be performed before tuning.
2) Do not turn off the power source during initialization or 1 second after.
3) Meaning of "INITIALIZATION" is to erase the "SKIP CH" In other words the number of channel position is the same as displayed channel.

Method:
1) Press the CH UP/DOWN Button so that the channel indicator indicates "3".
2) Connect a jumper wire between Pin 54 and Pin 35 of IC7501 for more than 1 second.
3) Channel indication changes from "3" to "1".

1-1-5. SERVICING THE PACK C.B.A.

When servicing the CAP Drive Pack C.B.A., Sub Audio Pack C.B.A., Luminance & Chrominance Pack C.B.A., Sub Luminance & Chrominance Pack C.B.A. and TV Demodulator Pack C.B.A., connections of extention cable are necessary as shown below.

PART NO	PART NAME	PCS	CONNECTION
VFK0678	18P EXTENTION CABLE	2	MAIN (PP3011) – SUB L/C (PS3303) MAIN (PP3012) – SUB L/C (PS3302)
VFK0764	10P EXTENTION CABLE	1	MAIN (PP2002) – CAP DRIVE (PS2002)
VFK0918	17P EXTENTION CABLE	1	MAIN (PP4501) – SUB AUDIO (PS4501)
VFK0937	9P EXTENTION CABLE	1	MAIN (PP3001) – L/C (PS301)
VFK0938	12P EXTENTION CABLE	2	MAIN (PP3002) – L/C (PS302) MAIN (PP2001) – CAP DRIVE (PS2001)
VFK0939	13P EXTENTION CABLE	1	MAIN (PP3003) – L/C (PS303)
VFK0940	14P EXTENTION CABLE	1	MAIN (PP3013) – SUB L/C (PS3501)
VFK0944	5P EXTENTION CABLE	3	MAIN (PP7401) – TV DEMODU (PS701) MAIN (PP7402) – TV DEMODU (PS702) MAIN (PP7403) – TV DEMODU (PS703)
VFK0890	6P EXTENTION CABLE	1	MAIN (PP7404) – TV DEMODU (PS704)

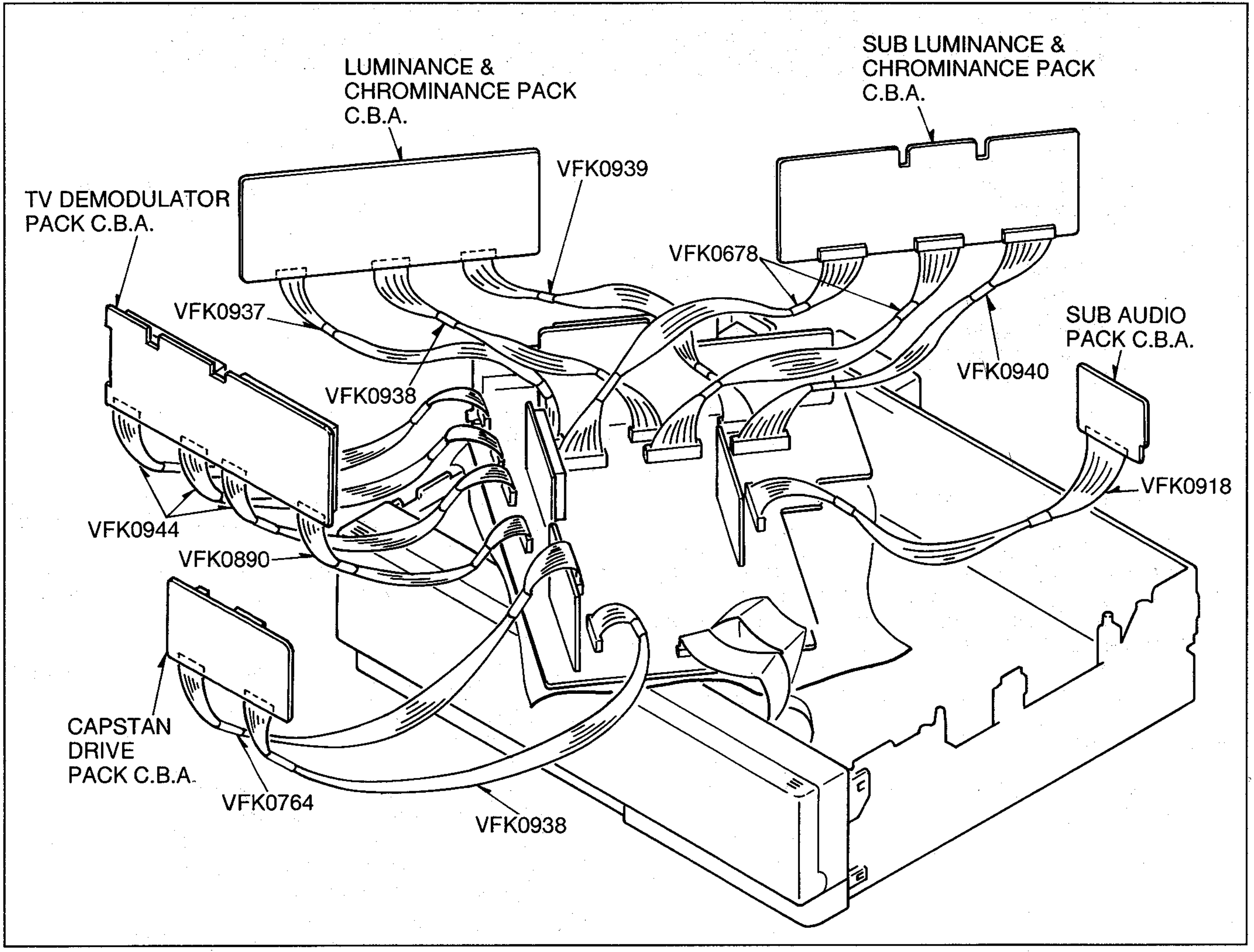

LUMINANCE & CHROMINANCE PACK C.B.A.
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
TV DEMODULATOR PACK C.B.A.
VFK0939
VFK0678
VFK0937
VFK0938
SUB AUDIO PACK C.B.A.
VFK0940
VFK0918
VFK0944
VFK0890
CAPSTAN DRIVE PACK C.B.A.
VFK0764
VFK0938

Fig. S10

1-2. SERIAL CLOCK TRANSMISSION ERROR DISPLAY

If the Serial Clock is not transmitted from IC6001 to IC7501, "E9" is displayed as shown in Fig. T1. This indication will be displayed either during the Service Information Display mode or in normal mode.

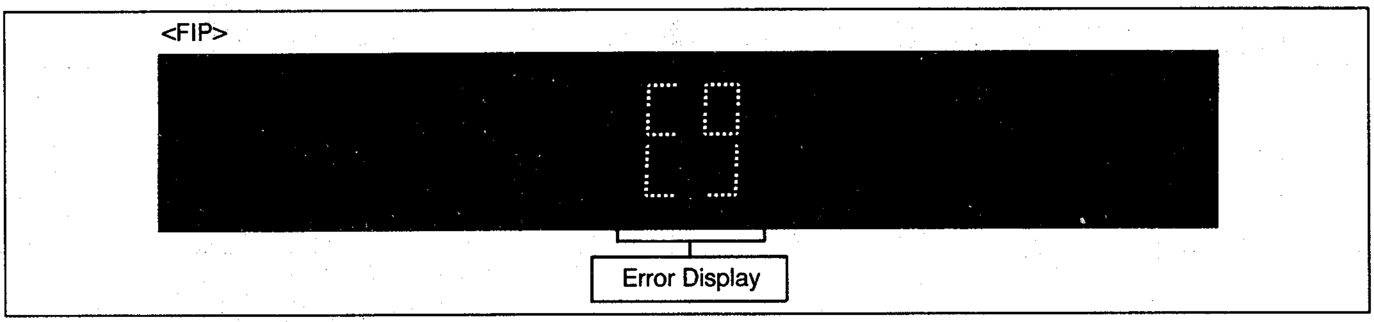

<FIP>
E9
Error Display

Fig. T1 Serial Data/Clock Transmission Error Display

1-3. SERVICE INFORMATION DISPLAY

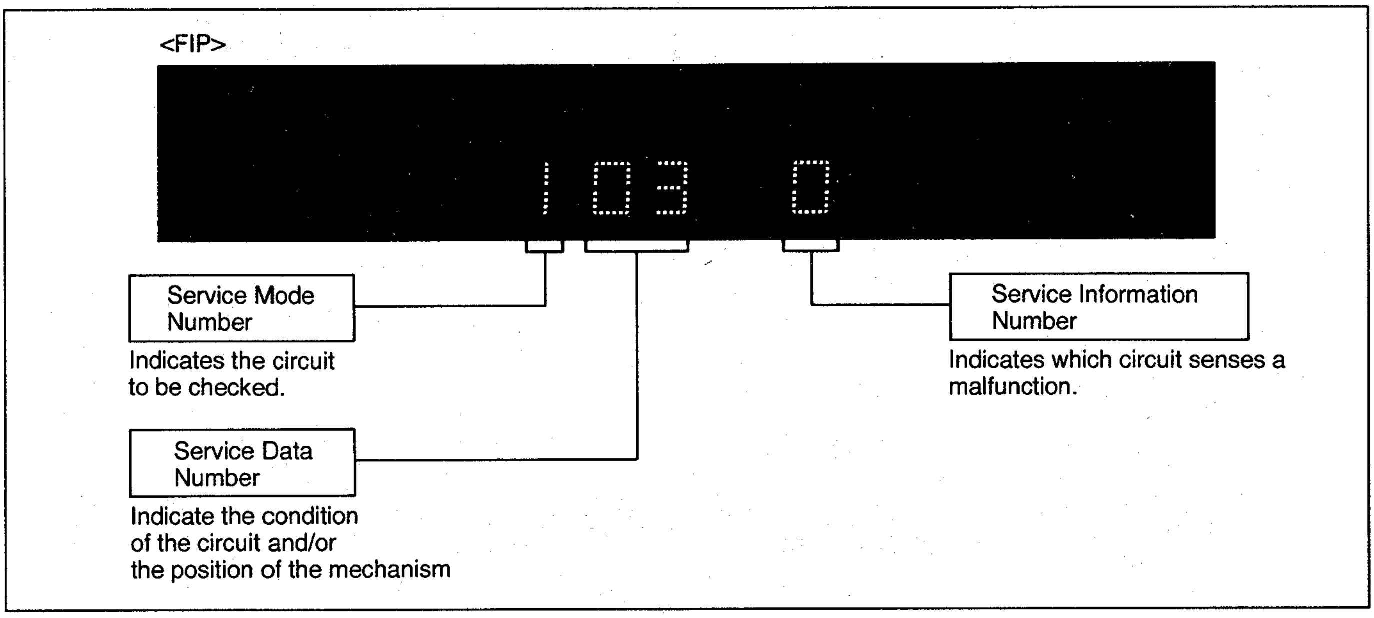

<FIP>
1 03 0
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicate the condition of the circuit and/or the position of the mechanism
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D1 Service Information Display

1-3-1. Purpose of Service Information Display

This information aids trouble shooting by indicating the source of the malfunction. The service mode number & service data number are used by the technician during repair while the service information can be used by the consumer to diagnose malfunctions allowing the technician to provide a more accurate repair cost estimate and reduce repair time.

1-3-2. Turning on Service Information Display

There are two ways to turn on the Service Information Display.

(1) Press the FF, REW and EJECT buttons simultaneously. The Service Information will be displayed for 1 minute.
(2) Connecting a Jumper wire between TP6010 and TP6011 will display the service information indefinitely.

In the Service Information Display, there are four digits divided into 3 functions.
The first digit indicates which of the 7 service modes that the unit is currently in.

MODE 1 : Checks tape protection circuit
MODE 2 : Checks tape transport mechanism
MODE 3 : Checks mode switching operation
MODE 4 : Checks control buttons
MODE 5 : Checks capstan motor
MODE 6 : Checks cylinder motor
MODE 7 : Checks loading/unloading operation

The second and third digits are service data which indicate the condition of the circuit or mechanism being checked.

The forth digit is the service Information display. It is to be used by the consumer to help determine the source of a malfunction. The service information display operates independently of the service modes and stores the fault indication in memory for as long as AC power is supplied.

1-3-3. Use of Service Modes

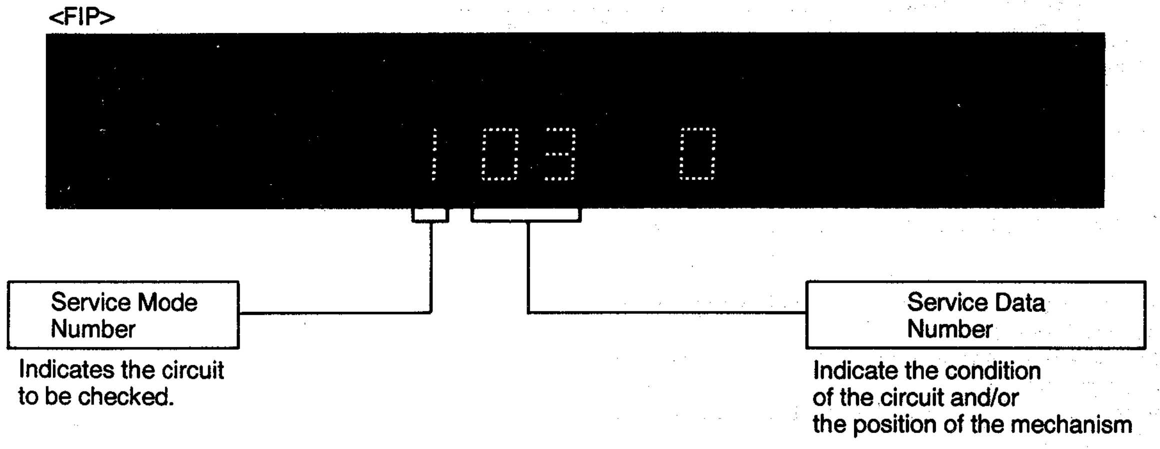

<FIP>
1 03 0
Service Mode Number
Indicates the circuit to be checked.
Service Data Number
Indicate the condition of the circuit and/or the position of the mechanism

Fig. D2 Service Mode Number and Service Data Number on S.I.D.

(1) Turn on Service Information Display.
(2) To change Service Modes press the FF, REW and EJECT buttons simultaneously.
(3) Mode 1: Checks that the Sensor LED, Supply & Take-up Sensor circuits check the circuits by blocking the light from the Sensor LED to either or both Supply & Take-up Sensors. When the light is blocked to both sensors, "00" should be indicated on the service data number. When the light is blocked to the supply sensor, "01" should be indicated.
(4) Mode 2: Checks the mode switch circuit while indicating mechanism position. Service Data Numbers indicate the position of the mode switch and there by the mechanism position.
(5) Mode 3: Checks that mode switch circuit operations have been completed. Service Data Number should indicate "00" after each mechanism operation is completed.
(6) Mode 4: Checks the operation circuit. Indicates if IC6001 receives the operating commands from the mode buttons and/or remote controller.
(7) Mode 5: Checks the capstan motor circuit. Indicates if the IC6001 has received the command to rotate the capstan motor.
(8) Mode 6: Checks the cylinder motor circuit. IC6001 has received the command to rotate the cylinder motor.
(9) Mode 7: Checks the Loading/Unloading Operation. The Loading Motor rotates for loading operation when the "PLAY" button pressed. The Loading Motor rotates for unloading operation when the "STOP" button is pressed. This mode can be displayed indefinitely until the OPERATE button is pressed.

<NOTE>
Refer to Fig. D5 for details of Service Data Number.

1-3-4. Service Information Number

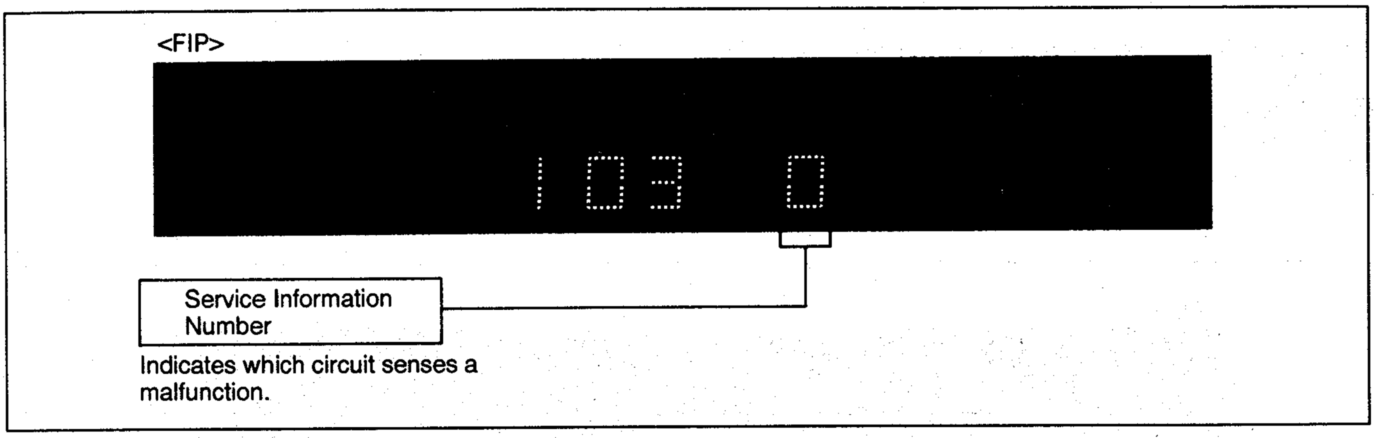

<FIP>
103 0
Service Information Number
Indicates which circuit senses a malfunction.

Fig. D3 Service Information Number on S.I.D.

Refer to Fig. D4 for details of Service Information Number.

Note:
The Service Information Number display is independent of the service mode display.
The Service Information Number will be stored as long as AC power is supplied.
If a second error occurs, only the most recent error will be displayed.

Service Information Number	Malfunction
0	Normal (No problem)
1	Cylinder stop
2	Tape reel stop
3	Stop at position other than 4 or 6
4	Stop during unloading
5	Faulty capstan rotation
6	Stop during Cassette-In/Eject operation

Fig. D4 Service Information

Service mode Number	Note for checking Service Data Numbers	Service Data Numbers	Indication	Remarks
1	—	00	No light detected at either sensor	Tape not required
		01	Tape Begining. Light to Supply Photo Sensor is blocked.	
		02	Tape End. Light to Take-up Photo Sensor is blocked.	
		03	Light detected at both sensors.	
2	—	00	EJECT	Tape Reuired *1 : STOP3; The Pinch Roller is on the capstan motor shaft. *2 : STOP; The Pinch Roller is off the capstan motor shaft. Refer to Fig. D7 to Check mechanism Position and timing. Note : Supply and Take-up Photo Sensor is inhibited.
		01	Cassette-down	
		02	REV, REV SLOW	
		03	Loading/Unloading	
		04	PLAY/REC, STILL/PAUSE, CUE, FWD SLOW, STOP3 *1	
		05	STOP *2	
		06	FF/REW	
		07	Intermediate position	
3	Disregard service data displayed until mechanism operation is completed. Then the display should indicate "00".	00	Any display other than "00" indicates a fault in the mode switch circuit or system.	Tape Required.
4	Display only when the operating button is pressed.	Refer to Fig. D6		Tape not required.
5	Left digit only, disregard Right digit display.	8 1 Left Digital Right Digital	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor "PLAY" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.
	Right digit only, disregard left digit display.	8 7 Left Digital Right Digital	1, 2, 3, 4, 5, 6, 7, indicate that the Capstan motor "CUE, FF, Forward Slow" commands received by IC6001.	
	Right digit only, disregard left digit display.	8 Left Digital Right Digital	8, 9, u, A, -, n, L, and no display indicate that the Capstan motor Reverse, Rew, Reverse Slow commands received by IC6001.	
6	Left digit only, disregard Right digit display.	1 0 Left Digital Right Digital	1, 3, 5, 7, 9, A, n and no display indicate that the cylinder motor "ON" command received by IC6001.	Tape required. If a symbol other than those listed is displayed, a malfunction in that circuit is indicated.

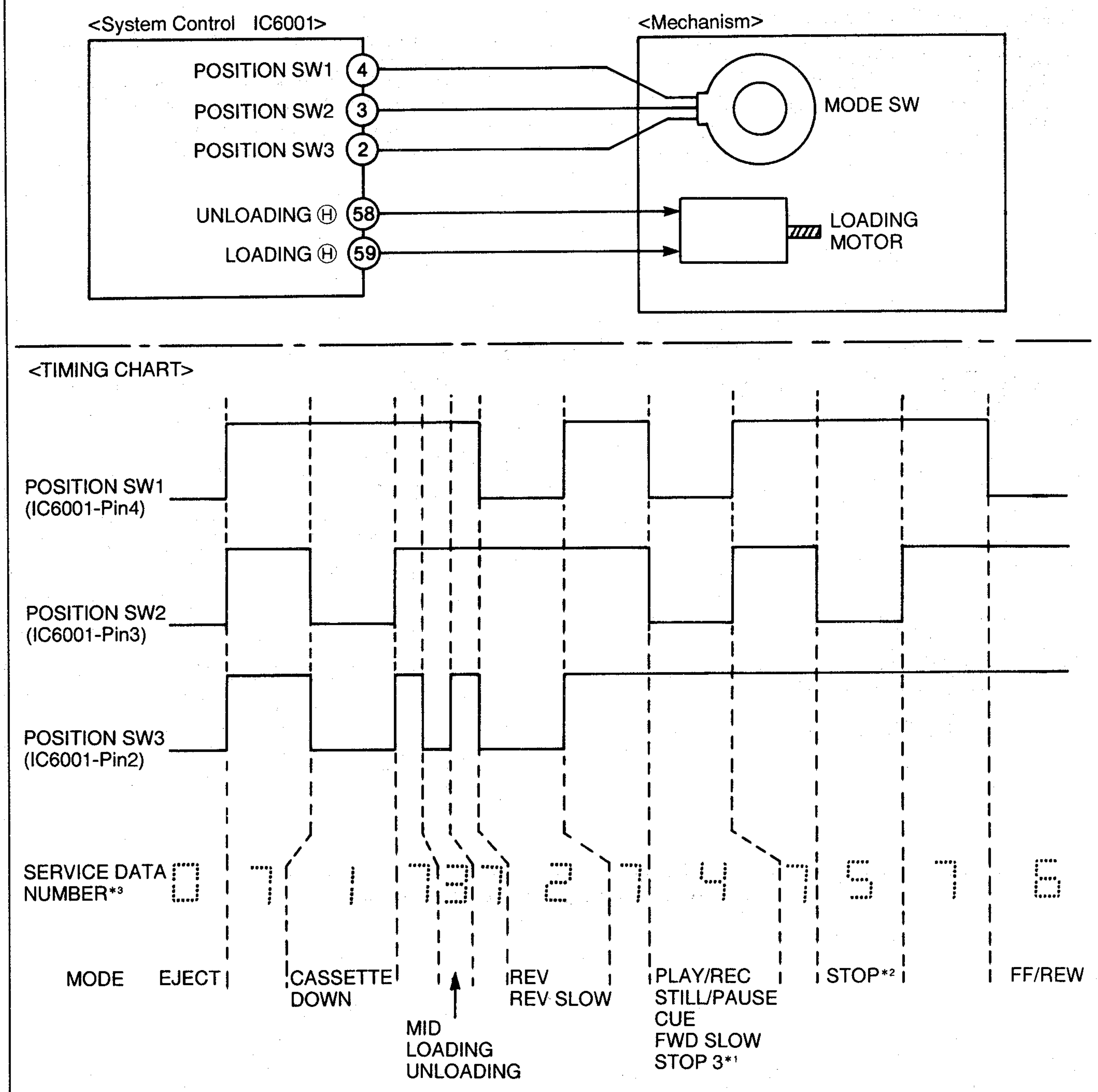
Fig. D5 Service Data Display and Indication

SERVICE DATA NUMBERS	MODE BUTTONS	SERVICE DATA NUMBERS	MODE BUTTONS
3n	OPERATE	—	RESET
01	EJECT	U4	PROG. CLEAR
09	AUDIO DUB	—	ESC
A3	INSERT	49.4U	INDEX (REMOTE CONTROLLER)
-9	PAL/MESECAM	—	TRACKING (+, -)/V-LOCK (REMOTE CONTROLLER)
—	CHECK/PROG.	U0	MARK IN
34.35	∧ ∨ (REMOTE CONTROLLER)	U1	MARK OUT
—	NEXT/SP/LP	—	TAPE SELECT (REMOTE CONTROLLER)
—	SLEEP/SHIFT	—	PLAYER
A4	TIMER REC	—	RECORDER
08	REC	—	RECORDING SP/LP (REMOTE CONTROLLER)
—	CLOCK SET	—	CANCEL (REMOTE CONTROLLER)
—	TUNER PRESET	10	SU (1) (REMOTE CONTROLLER)
80	PAUSE/STILL	11	MO (2) (REMOTE CONTROLLER)
0U	PLAY	12	TU (3) (REMOTE CONTROLLER)
00	STOP	13	WE (4) (REMOTE CONTROLLER)
06	PAUSE/STILL (REMOTE CONTROLLER)	14	TH (5) (REMOTE CONTROLLER)
03.02	FF, REW	15	FR (6) (REMOTE CONTROLLER)
U5	EDIT MENU	16	SA (7) (REMOTE CONTROLLER)
—	▲	17	SU~SA (8) (REMOTE CONTROLLER)
—	TRANSMIT (REMOTE CONTROLLER)	18	MO~SA (9) (REMOTE CONTROLLER)
0	SLOW (REMOTE CONTROLLER)	19	MO~FR (0) (REMOTE CONTROLLER)
—	▼	3A	-/-- (REMOTE CONTROLLER)
—	ENTER	—	AUDIO OUT
56	DISPLAY (REMOTE CONTROLLER)	57	OSD (REMOTE CONTROLLER)

Fig. D6 Service Data Display for Service mode 4

1-3-5. Timing Chart from Mode SW to System control IC6001

System control IC6001 senses the mechanism position though the Mode SW.
Fig. D7 shows the timing for Service Mode Number 2.



<System Control IC6001>
POSITION SW1 4
POSITION SW2 3
POSITION SW3 2
UNLOADING Ⓗ 58
LOADING Ⓗ 59
<Mechanism>
MODE SW
LOADING MOTOR
<TIMING CHART>
POSITION SW1 (IC6001-Pin4)
POSITION SW2 (IC6001-Pin3)
POSITION SW3 (IC6001-Pin2)
SERVICE DATA NUMBER*3
0 7 1 7 3 7 2 7 4 7 5 7 6
MODE
EJECT
CASSETTE DOWN
MID LOADING UNLOADING
REV REV SLOW
PLAY/REC STILL/PAUSE CUE FWD SLOW STOP 3*1
STOP*2
FF/REW

∗1 : Stop 3; The Pinch Roller is on the capstan motor shaft.

∗2 : Stop; The Pinch Roller is off the capstan motor shaft.

∗3 : Service Data Number; This is for Service Mode Number 2.

Fig. D7 Timing Chart of Mode SW

1-4. TECHNICAL INFORMATION

1-4-1. EDIT CONTROLLER FUNCTION

This VCR is equipped with programme editing.
If connected via edit cable to another VCR or a movie camera, it is possible to control such functions as tape playback and editing.

(1) Connecting this VCR with another identical one.

1) Connect the two VCRs with 5-pin edit cable.
2) Connect the AV1 socket on the playback VCR to the AV2 socket on the recording VCR.
3) Connect the AV1 socket on the recording VCR to the TV.
4) Select A2 by pressing "∧"∨" or INPUT SELECT on the recording VCR.
5) Set EDIT MODE to Passive on the playback VCR, and to RECORDER on the recording VCR.
6) Control is performed by the recording VCR.

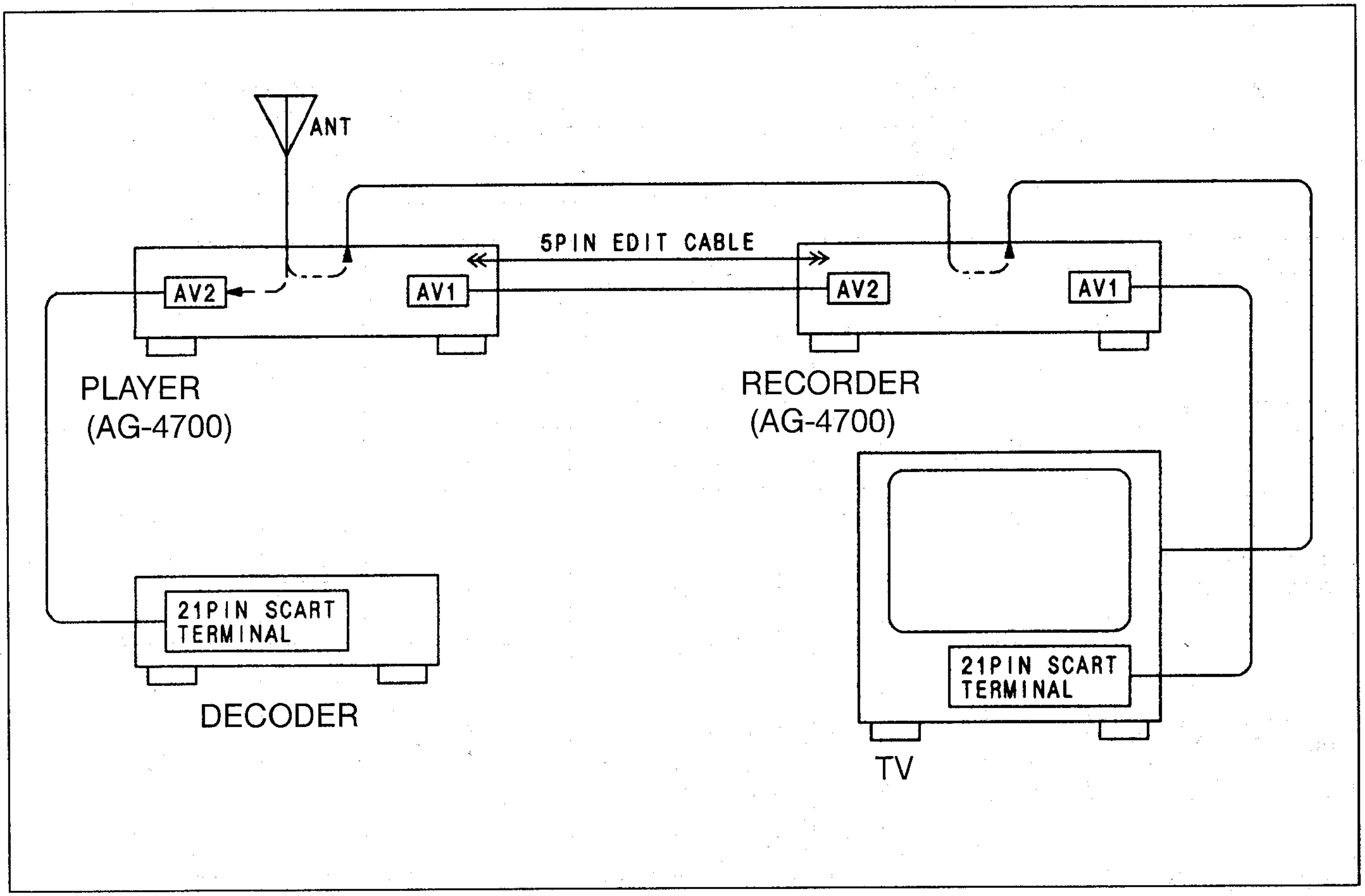

ANT
5PIN EDIT CABLE
AV2
AV1
AV2
AV1
PLAYER
(AG-4700)
RECORDER
(AG-4700)
21PIN SCART TERMINAL
DECODER
21PIN SCART TERMINAL
TV

Fig. A1 Connection of Editing Controller Function

1-4-2. AI (ARTIFICAL INTELLIGENCE) RECORDING FUNCTION

The recording and playback are adjusted to achieve optimum picture quality from tapes with varying charactristics.

(1) Detail explanation

<Playback mode>

The picture quality is varying from the different tapes as follows:

1) If the output level is low, from worn or rental cassette tapes, a soft picture is obtained by the RF equlizer and picture control on the Lumi./Chro. Pack C.B.A.
2) If the output level is medium, from normal tapes, a sharp picture is obtained from the emphasis and picture control on the Lumi./Chro. Pack C.B.A.
3) If the output level is high, from HG/S tapes, a sharp and detailed picture is obtained from the RF equlizer, emphasis picture control and noise canceller on the Lumi./Chro. Pack C.B.A.

<Recording mode>

The optimum recording level is used for all head conditions and for all types of tapes.

1) The luminance S/N is boosted 2dB.
2) Recording head wear compensation.
3) The optimum recording current is achieved in 1.5 seconds.

(2) Signal Flow

<Playback mode>

1) When the AI is turned on, the AI TRIG (H) signal is supplied to IC3403 from pin 122 of IC6001. The AI CNT (H) is supplied to the Lumi./Chro. Pack C.B.A., IC6001 and the Erase Current Generator circuit.
2) The RF C signal from the Head Amp C.B.A. is used by the IC3403 to detect the output level of the video head.
3) After receiving the RF C signal, the IC3403 supplies ENVE1 and ENVE2 to the Lumi./Chro. Pack as shown in Fig. A1.
4) The optimum picture is output from the video circuit.

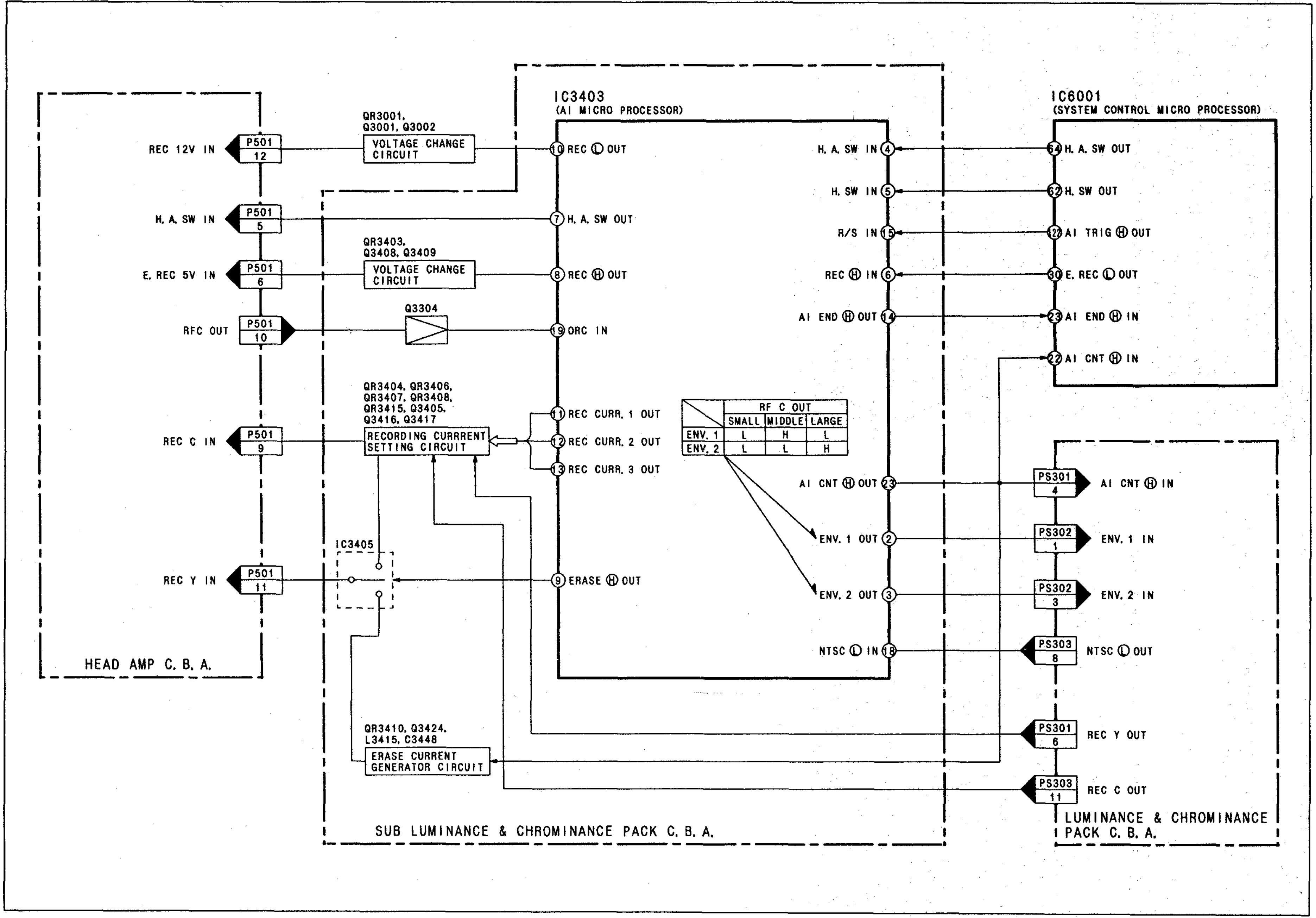
<Recording mode>

1) When the AI is turned on, the AI TRIG (H) signal is supplied to IC3403 from pin 122 of IC6001. The AI CNT (H) is supplied to the Lumi./Chro. Pack C.B.A., IC6001 and the Erase Current Generator circuit.
2) Before recording, the recording and playback operations are done in the still mode to determine the optimum recording current. The signal level detection is the same as the playback mode operation. The recording current is set by the REC CUR1, 2, 3 signals from IC3403. IC3405 is used for erasing the tape in the still mode.

<Others>

The NTSC (L) signal is used for setting the system to NTSC or PAL.

Other command signals are used to control the performance timing.


HEAD AMP C. B. A.
REC 12V IN
P501 12
H. A. SW IN
P501 5
E. REC 5V IN
P501 6
RFC OUT
P501 10
REC C IN
P501 9
REC Y IN
P501 11
QR3001, Q3001, Q3002
VOLTAGE CHANGE CIRCUIT
QR3403, Q3408, Q3409
VOLTAGE CHANGE CIRCUIT
Q3304
QR3404, QR3406, QR3407, QR3408, QR3415, Q3405, Q3416, Q3417
RECORDING CURRRENT SETTING CIRCUIT
IC3405
QR3410, Q3424, L3415, C3448
ERASE CURRENT GENERATOR CIRCUIT
SUB LUMINANCE & CHROMINANCE PACK C. B. A.
IC3403
(AI MICRO PROCESSOR)
10 REC Ⓛ OUT
7 H. A. SW OUT
8 REC Ⓗ OUT
19 ORC IN
11 REC CURR. 1 OUT
12 REC CURR. 2 OUT
13 REC CURR. 3 OUT
9 ERASE Ⓗ OUT
H. A. SW IN 4
H. SW IN 5
R/S IN 15
REC Ⓗ IN 6
AI END Ⓗ OUT 14
AI CNT Ⓗ OUT 23
ENV. 1 OUT 2
ENV. 2 OUT 3
NTSC Ⓛ IN 18
IC6001
(SYSTEM CONTROL MICRO PROCESSOR)
64 H. A. SW OUT
62 H. SW OUT
12 AI TRIG Ⓗ OUT
30 E. REC Ⓛ OUT
23 AI END Ⓗ IN
22 AI CNT Ⓗ IN
PS301 4
AI CNT Ⓗ IN
PS302 1
ENV. 1 IN
PS302 3
ENV. 2 IN
PS303 8
NTSC Ⓛ OUT
PS301 6
REC Y OUT
PS303 11
REC C OUT
LUMINANCE & CHROMINANCE PACK C. B. A.

	RF C OUT		
	SMALL	MIDDLE	LARGE
ENV. 1	L	H	L
ENV. 2	L	L	H

Fig. A2 Simplified AI Function Block Diagram

(2) Signal Flow

Fig. A3 below describes Video/Audio signal flow.
The control commands go from Recorder to Player
through 5-Pin Edit Cable.

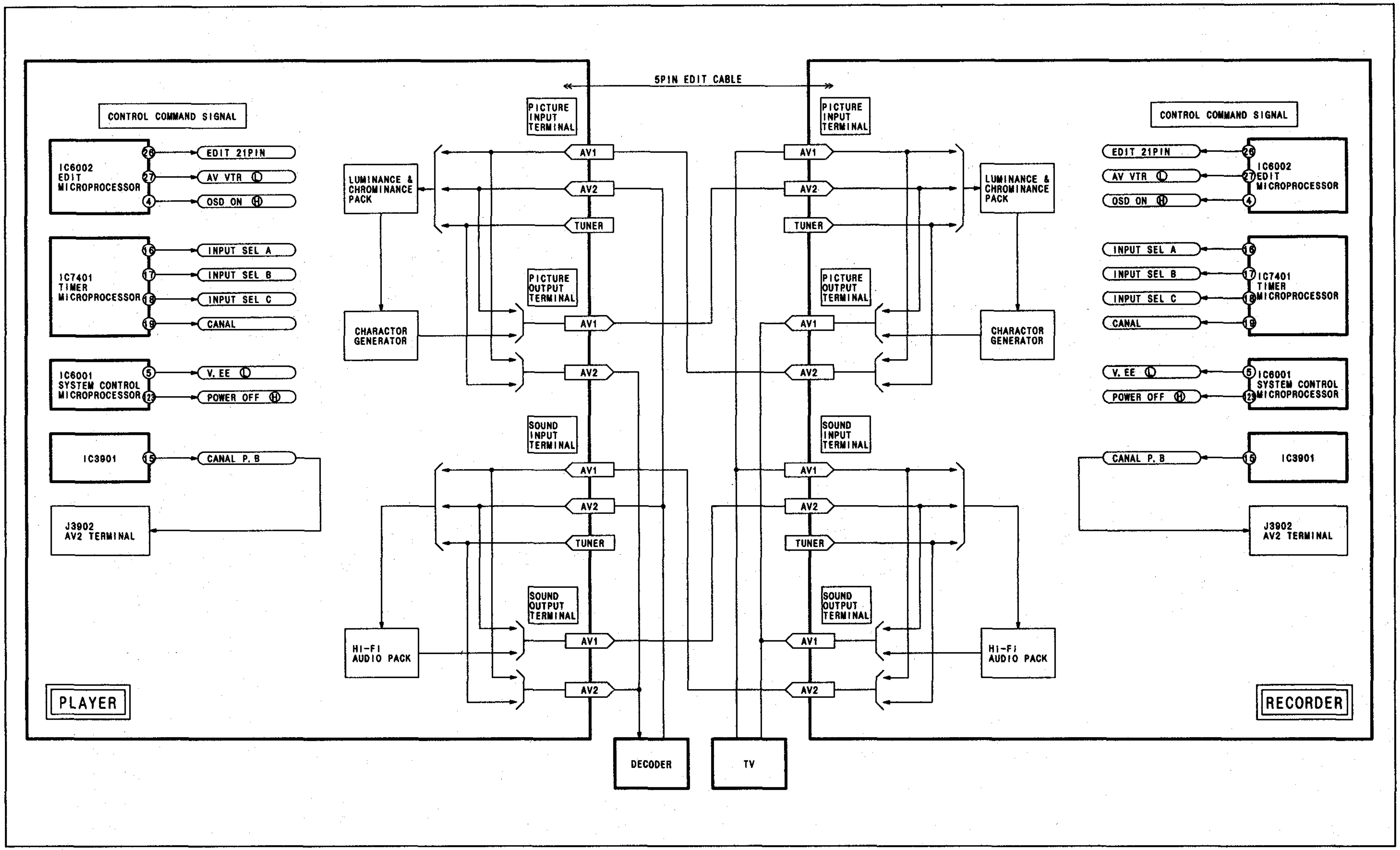

5PIN EDIT CABLE
CONTROL COMMAND SIGNAL
IC6002 EDIT MICROPROCESSOR
26
27
4
EDIT 21PIN
AV VTR Ⓛ
OSD ON Ⓗ
IC7401 TIMER MICROPROCESSOR
16
17
18
19
INPUT SEL A
INPUT SEL B
INPUT SEL C
CANAL
IC6001 SYSTEM CONTROL MICROPROCESSOR
5
23
V. EE Ⓛ
POWER OFF Ⓗ
IC3901
15
CANAL P. B
J3902 AV2 TERMINAL
LUMINANCE & CHROMINANCE PACK
CHARACTOR GENERATOR
HI-FI AUDIO PACK
PICTURE INPUT TERMINAL
PICTURE OUTPUT TERMINAL
SOUND INPUT TERMINAL
SOUND OUTPUT TERMINAL
AV1
AV2
TUNER
PLAYER
RECORDER
DECODER
TV

Fig. A3 Signal Flow

(3) Input/Output Chart for Edit IC6002 (M38024V1BK)

Pin Number	Input/Output	Port Name	Function
1	O	OSD CLK	Character Generator Control Clock
2	O	OSD DATA	Character Generator Control Data
3	O	OSD CS	Character Generator Control Chip Select (L)
4	O	OSD ON (H)	Editing OSD ON (H)
5, 6	-	----------	Not used
7	I	L CLK CNT	Serial Clock Counter Terminal
8	-	----------	Not used
9	I	SYS CLK	System Control Serial Clock
10	O	SYS OUT	System Control Serial Data
11	I	SYS IN	System Control Serial Data
12	O	DATA INH	5P Clock Data Output Inhibit (H)
13	I	CLK INPUT	Timer/5P/Serial Clock
14	O	DATA OUT	5P/Serial Data
15	I	DATA IN	5P/Serial Data
16, 17	-	----------	Not used
18	-	GND	GND
19	I	RESET (L)	Reset by Low signal
20	I	L CLK	Serial Data timing detection
21	I	5P CLK	5P Clock detection
22	I	OSC IN	7.37MHz OSC
23	O	OSC OUT	7.37MHz OSC
24	-	GND	GND
25	O	JOG LED (H)	JOG/SHUTTLE Mode ON (H)
26	O	EDIT21P	AV2 Terminal Output (H) in the Editing OSD mode
27	O	AVVTR (L)	AV2 Terminal Output (H) in the Editing OSD mode
28	O	TBC SEARCH (L)	CUE/REV Detection in TBC mode
29	O	TBC TRICK (L)	PLAY Detection in TBC mode

Pin Number	Input/Output	Port Name	Function
30	O	TBC ON (L)	TBC ON (L)
31	-	----------	Not used
32	O	EDIT (H)	Picture Edit mode (H)
33	I	TEST SIGNAL (H)	Tuner Preset Display ON (H)
34	I	OSD SECAM (H)	OSD ON (H) by SECAM System
35	O	INSIDE (H)	Internal OSD ON (H)
36	I	SEARCH MUTE OK (H)	Sound Serch Mute (H)
37	I	VITC OK (H)	VITC ON (H)
38	I	LANGUAGE2	<OSD Langage Setting> 000 = English, 001 = German 010 = French, 011 = Italian 100 = Spanish, 101 = Dutch 110 = Swedish
39	I	LANGUAGE1	
40	I	LANGUAGE0	
41 ~ 46	-	----------	Not used
47	O	BUS SELECT (B)	Timer/5P/Serial Bus Selection
48	O	BUS SELECT (A)	Timer/5P/Serial Bus Selection
49	I	CHECK (L)	Factory mode (L)
50 ~ 56	-	----------	Not used
57, 58	I	VDD	5 V
59	-	GND	GND
60	I	EE DATA IN	Data from IC6007 (EEPROM)
61	O	EE DATA OUT	Data to IC6007 (EEPROM)
62	O	EE CLK	Clock to IC6007 (EEPROM)
63	O	EE CS	Chip Select to IC6007 (EEPROM)
64	I	REC/P1/P2	Recorder (H)/Player1 (M)/Player2 (L)

1-4-3. NEW SERIAL DATA TRANSMISSION

1. Serial data transmission

To exchange the data among the microprocessors, the serial data transmission is used.
Serial data transmission is used because of the relatively large amount of information that can be sent in a signal data line.
Actually two lines are required in this system, an in/out data line and a clock line.
The data in/out line between each microprocessor is timeshared.

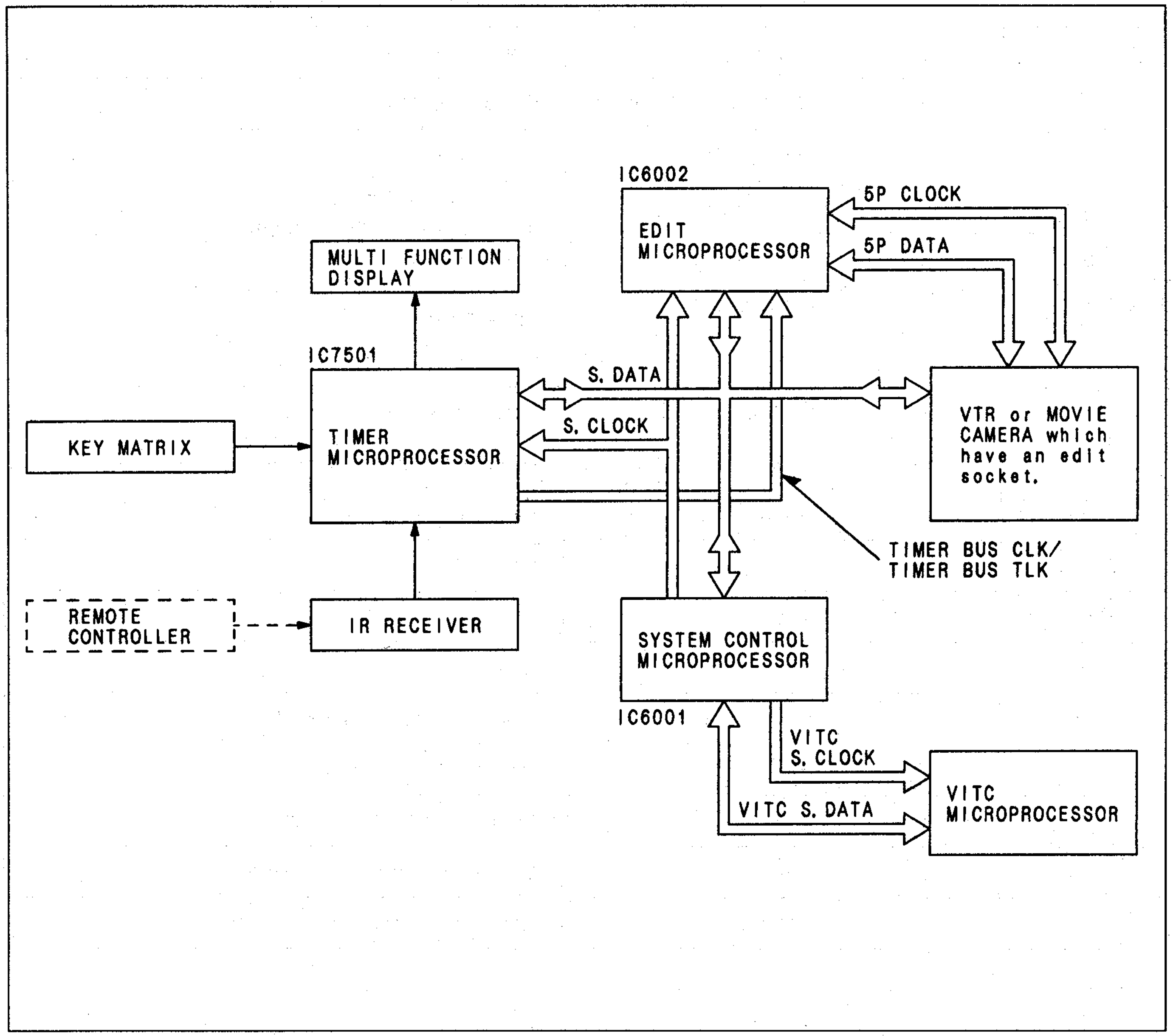

IC6002
EDIT MICROPROCESSOR
5P CLOCK
5P DATA
MULTI FUNCTION DISPLAY
IC7501
S. DATA
S. CLOCK
KEY MATRIX
TIMER MICROPROCESSOR
VTR or MOVIE CAMERA which have an edit socket.
TIMER BUS CLK/
TIMER BUS TLK
REMOTE CONTROLLER
IR RECEIVER
SYSTEM CONTROL MICROPROCESSOR
IC6001
VITC S. CLOCK
VITC S. DATA
VITC MICROPROCESSOR

Fig. A4

2. Serial clock line and data line

This serial clock signal is a reference signal which is used to control the timing of the data transmission among the microprocessors.

The previous transmission has only 13 clocknumber, the new serial data transmission has 20 clock number in it.

Blocks 1 to 10 of both formats will be the same.

Now the clock number from 1 to 13 is same.

The contents of new data is as shown below.

S. Clock is used for transmission of the data among the system control microprocessor, timer microprocessor and edit microprocessor.

And 5P Clock which is composed of the clock no. 1, 3, 4, 5, 7, 8, 9 works to transmit the data between the edit microprocessor and the VTR or MOVIE CAMERA which has an edit socket.

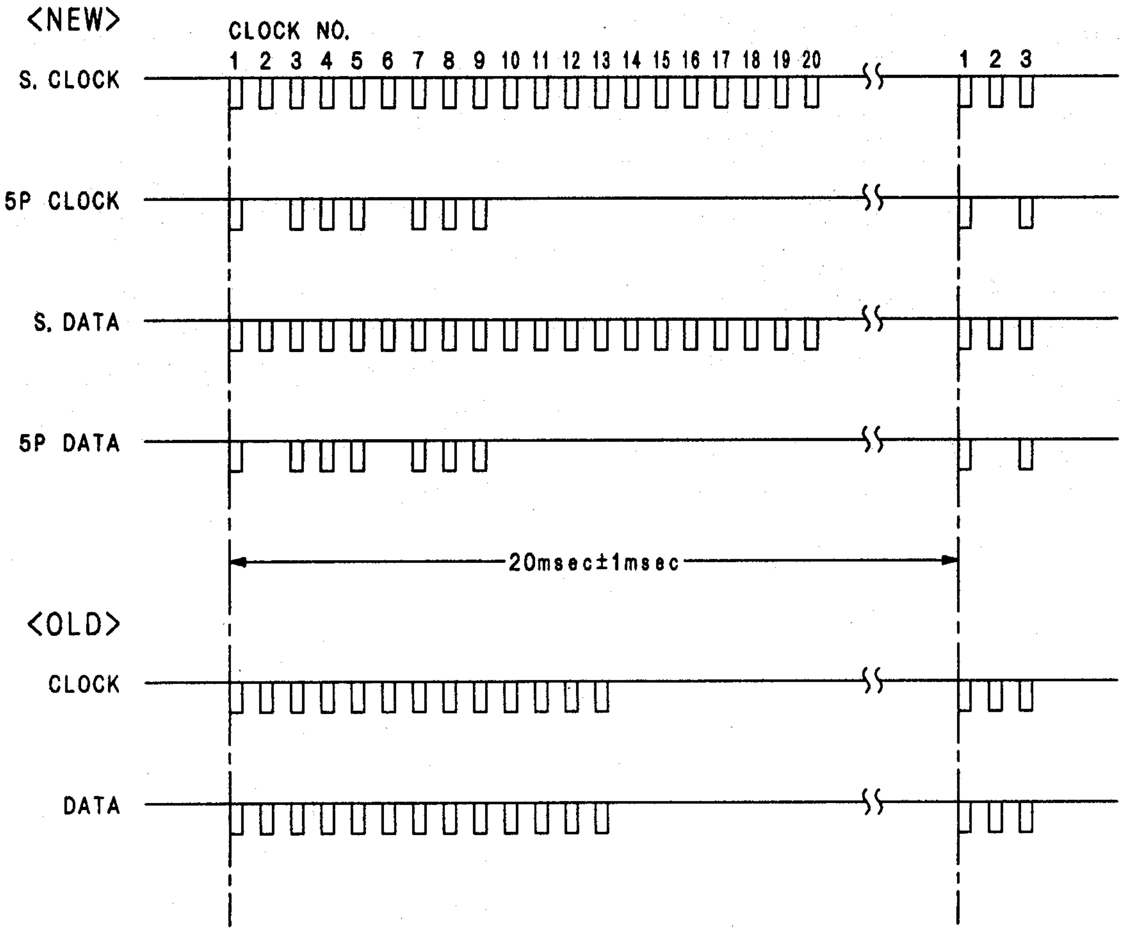

<NEW>
CLOCK NO.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
1 2 3
S. CLOCK
5P CLOCK
S. DATA
5P DATA
20msec±1msec
<OLD>
CLOCK
DATA

Fig. A5

CLOCK NO	TRANSMISSION	CONTENTS OF DATA	CLOCK NO	TRANSMISSION	CONTENTS OF DATA
1	IC7501 ← IC6001	TAPE SPEED M/R/S etc.	11	IC7501 ← IC6001	SEARCH MODE CONDITION CODE
2	IC6001 ← IC7501	WIRELESS REMOTE AND KEY CONTROL CODE	12	IC7501 ← IC6001	FRAME NUMBER CODE
3	IC6001 ← IC7501	TIMER INSTRUCTIONS CODE	13	NOT USED	———
4	IC6001 ← EDIT CONTROLLER	EDIT CONTROLLER INSTRUCTIONS CODE	14	IC6001 ← IC7501	JOG/SHUTTLE CODE
5	IC7501 ← IC6001	TRANSMISSION OF VTR MODE CODE	15	IC6001 ← IC7501	AI SWITCH CONDITION
6	IC7501 ← IC6001	DISPLAY INDICATION CODE (POWER ON/OFF etc.)	16	IC6001 ← IC7501	AUDIO CONDITION CODE
7	IC7501 ← IC6001	COUNTER/TAPE REMAINING CODE	17	IC7501 ← IC6001	PLAY BACK BILINGUAL CONDITION CODE
8	IC7501 ← IC6001	COUNTER/TAPE REMAINING CODE	18	IC6002 ← IC6001	VITC CODE
9	IC7501 ← IC6001	COUNTER/TAPE REMAINING CODE	19	IC6001 ← IC6002	EDIT MICROPROCESSOR INSTRUCTION CODE
10	IC6001 ← IC7501	TIMER CONDITION CODE	20	NOT USED	———

Fig. A6

CONTENTS

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Caution for AC Mains Lead For AG-4700B

For Your safety please read the following text carefully
This appliance is supplied with a moulded three pin mains plug for your safety and convenience.
A 5 amp fuse is fitted in this plug.
Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS 1362.
Check for the ASTA mark ◈ or the BSI mark ♡ on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the plug must not be used until a replacement cover is obtained.
A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.
THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.
If in any doubt please consult a qualified electrician.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the earth terminal of the three pin plug, marked with the letter E or Earth Symbol ⏚.

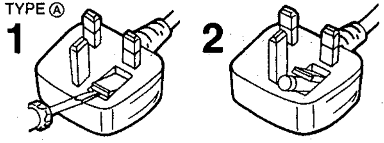
How to replace the Fuse

- There are two types of the supplied AC Mains Lead: Ⓐ and Ⓑ as shown below.

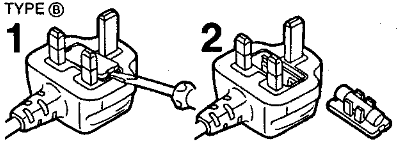
1 Open the fuse compartment with a screwdriver.

2 Replace the fuse and fuse cover.

TYPE Ⓐ



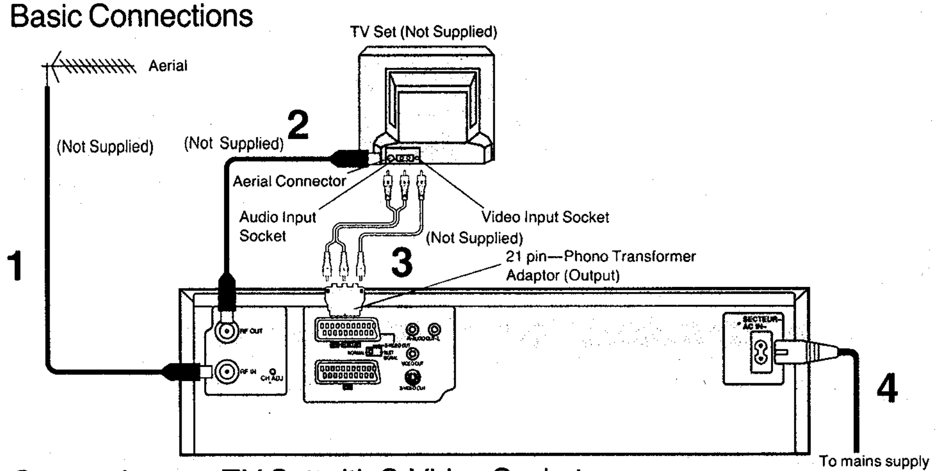
TYPE Ⓑ



Connections

This tells you how to connect with an aerial, TV, VTR, etc.

Basic Connections

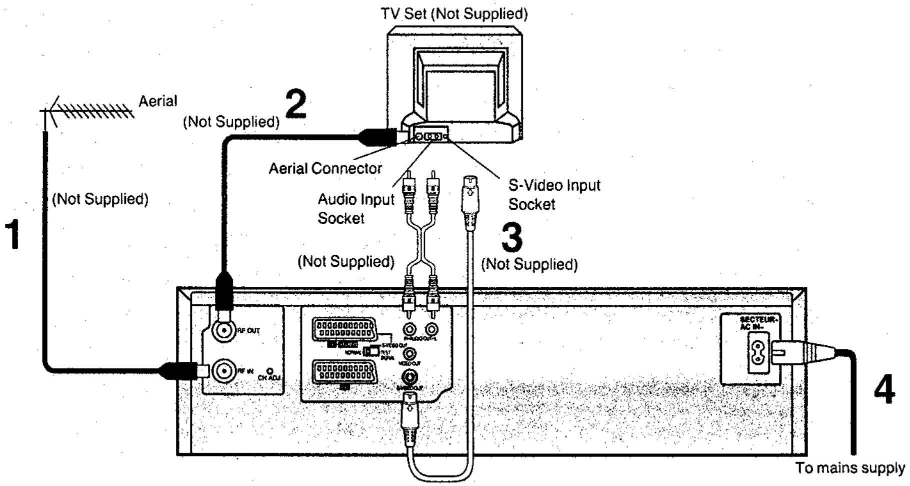

TV Set (Not Supplied)
Aerial
(Not Supplied)
(Not Supplied)
2
Aerial Connector
Audio Input Socket
Video Input Socket
(Not Supplied)
1
3
21 pin—Phono Transformer Adaptor (Output)
4
To mains supply

Connection to a TV Set with S-Video Socket

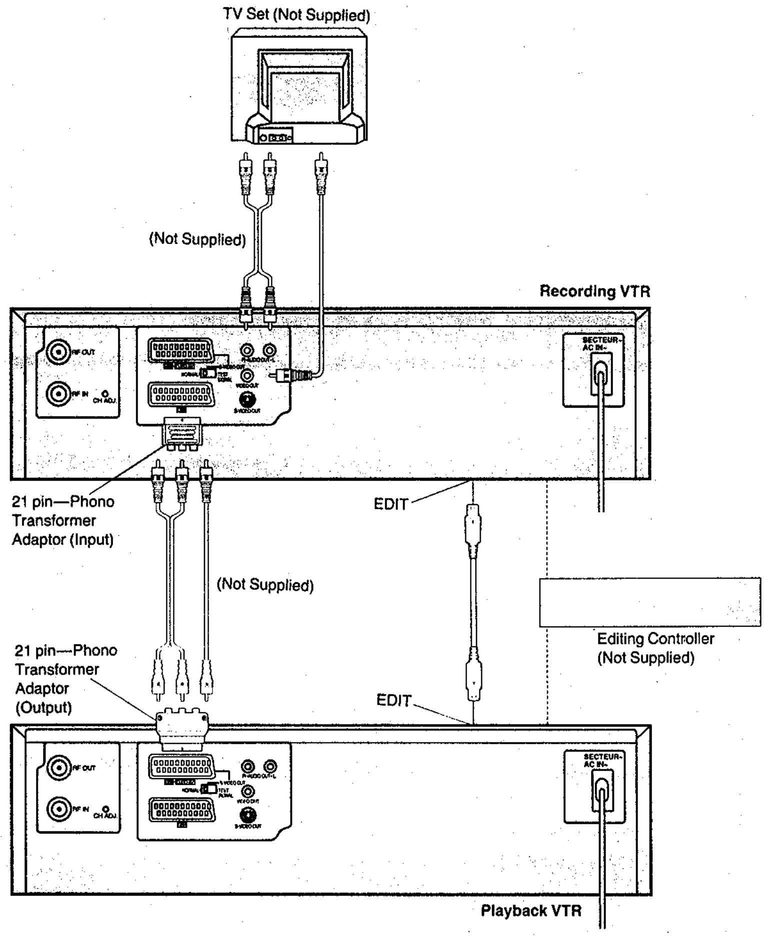
This VTR uses the S-VHS format that makes it possible to obtain high resolution and high picture quality by using the high-performance S-VHS video cassette tapes.

The conventional video sockets of VTRs output (input) a combination of the luminance signal (Y) and colour signal (C) which are recorded on the video tape. The new S (Separate)-Video Socket allows separate transmission of signals in order to obtain clearer pictures.

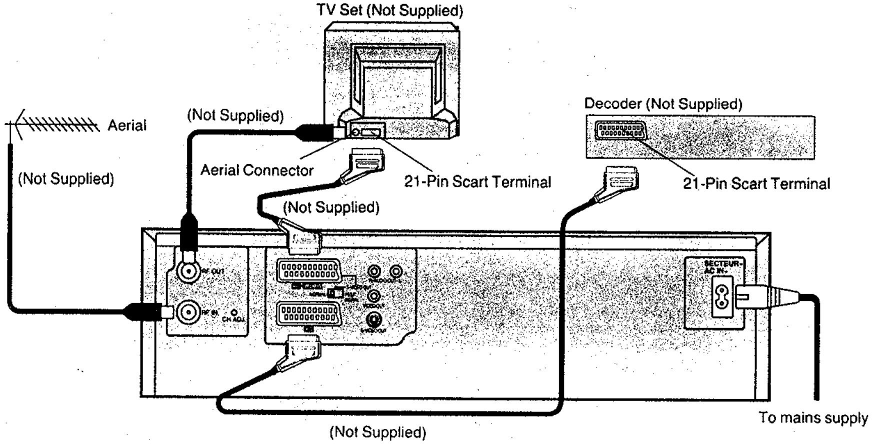
The connection with the S-Video Cable can also be used for playback of a tape that was recorded in the conventional VHS system. The "S" in the "S-Video Socket" stands for "SEPARATED Y/C" not for "S-VHS".


TV Set (Not Supplied)
Aerial
(Not Supplied)
2
Aerial Connector
(Not Supplied)
1
Audio Input Socket
S-Video Input Socket
3
(Not Supplied)
(Not Supplied)
4
To mains supply

Editing Connections


TV Set (Not Supplied)
(Not Supplied)
Recording VTR
21 pin—Phono Transformer Adaptor (Input)
EDIT
(Not Supplied)
Editing Controller (Not Supplied)
21 pin—Phono Transformer Adaptor (Output)
EDIT
Playback VTR

Connection to a Decoder **(AG-4700E only)**



Note:
If the TV set is provided with an RGB-compatible connector, connect the 21-pin AV cable from the VTR to this connector. Use full-pin 21-pin AV cables for connecting the TV set and VTR and for connecting the VTR and decoder.

AV LINK

With this button the connected colour TV set can be switched from TV mode to VTR mode (vice versa) when it is connected by means of 21-pin scart cable.

This makes a variety of functions possible, such as simultaneous recording and viewing when a Pay TV decoder or a satellite receiver has been connected.

VTR mode (VTR indicator lights):
To enjoy sound and pictures from the VTR.

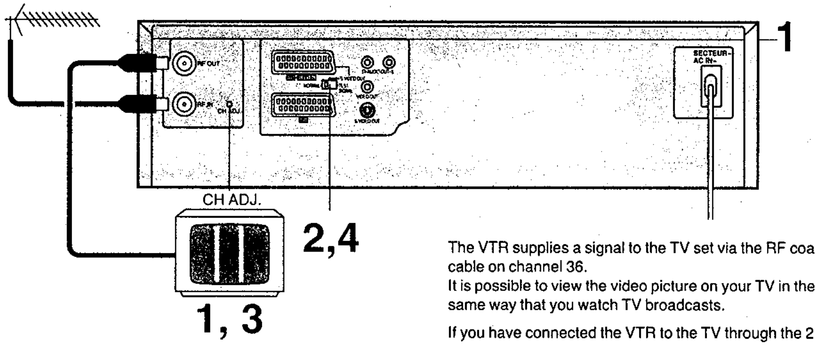
TV mode (VTR indicator goes off):
To watch another programme on the TV while recording on the VTR.

- Select the programme to be watched using the TV set's tuner.
- The sound and pictures of a different channel are received by the VTR.

VTR		TV set
Power On	VTR mode	AV input selected
	TV mode	Input from TV set's tuner*
Power Off	—	Input from TV set's tuner

*When the VTR is set to the TV mode and the Pay TV channel is selected, the signals will still be scrambled even when Pay TV is selected by the TV set's tuner. At a time like this, either set the VTR to the VTR mode or switch the TV set's input signals to AV input.

Tuning the TV to your VTR



The VTR supplies a signal to the TV set via the RF coaxial cable on channel 36.
It is possible to view the video picture on your TV in the same way that you watch TV broadcasts.

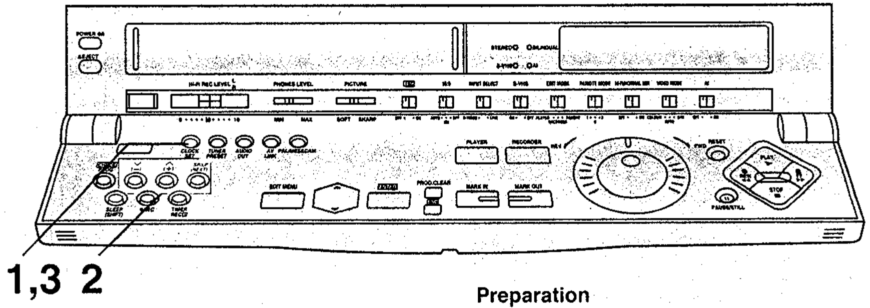
If you have connected the VTR to the TV through the 21-pin scart terminal or Audio/Video/S-Video output sockets then you do not need to follow the procedure mentioned below.

Operations

1	POWER ⏻/I	Turn on the TV and VTR.
2	→ S-VIDEO OUT NORMAL ☐ TEST SIGNAL	To generate a test pattern, set **NORMAL/ S-VIDEO OUT/TEST SIGNAL** to TEST SIGNAL.
3		Set the TV to an unused position which you wish to use for your video playback.
4	← S-VIDEO OUT NORMAL ☐ TEST SIGNAL	Set **NORMAL/S-VIDEO OUT/TEST SIGNAL** to NORMAL.

Note:
The test signal is transmitted on video channel 36. If you are encountering interference from a TV broadcast on this video channel, you may readjust to another free channel (32~40) by using the **CH ADJ.** screw which is located on the rear of the VTR. When rotating the **CH ADJ.** screw, take care not to turn it too far.
Please note that if the **CH ADJ.** screw is used then you will have to retune your TV to the test signal as in item **2** to **4** above.

Setting the Clock of the VTR

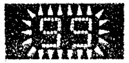
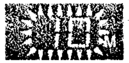
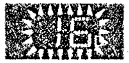
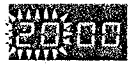
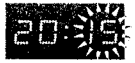
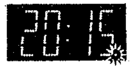


The built-in clock is used to activate the timer for automatic recording and must be set to the correct time.

The built-in digital clock employs the 24-hour system.

Preparation
Turn on the VTR.

For Example:
Date; 16th, October, 1999
Time; 20:15

Operations	Display Symbols	
1 ○ CLOCK SET		Keep **CLOCK SET** pressed for more than 2 seconds.
2 Set each item by pressing ∧ (+) or ∨ (−) and **SP/LP (NEXT)**.		
∨ (−) ∧ (+) ○ ○		Set **Year** "99".
		Set **Month** "10".
↓		Set **Date** "16".
SP/LP (NEXT) ○		Set **Hour** "20".
		Set **Minute** "15". •There is no need to press **SP/LP (NEXT)**.
3 ○ CLOCK SET		Press **CLOCK SET**. •The clock will start.

Note:
The clock operates for at least 60 minutes by its backup system in the event of power failure.

Time Reset Function

If the clock is less than two minutes slow or fast, it can easily be reset to the proper time.

For example:
Resetting the clock to 12:00.00

1. Keep **CLOCK SET** pressed at any time between 11:58.00 and 12:01.59 for more than 2 seconds.
2. Press **CLOCK SET** again as soon as you hear the 12:00.00 time signal.

Summer Time Function (AG-4700E only)

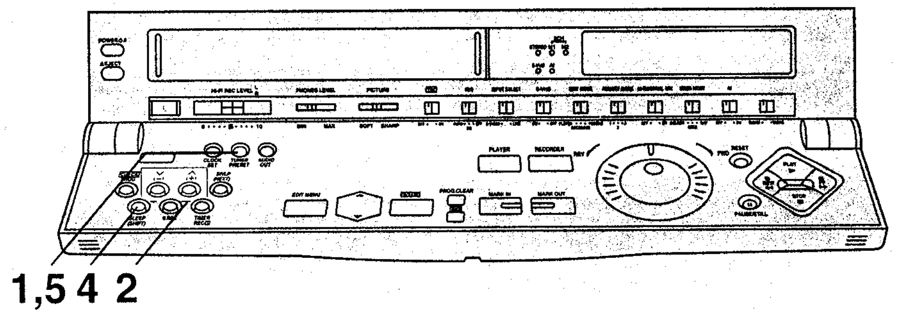
Setting to summer time

1. Keep **CLOCK SET** pressed for more than 2 seconds.
2. Press **SLEEP (SHIFT)**.
   - The time on the clock is advanced by 1 hour.
3. Press **CLOCK SET**.

Returning from summer time to standard time

1. Keep **CLOCK SET** pressed for more than 2 seconds.
2. Press **SLEEP (SHIFT)** twice.
   - The time on the clock is set back by 1 hour.
3. Press **CLOCK SET**.

Storing TV Broadcasts into your VTR For AG-4700B

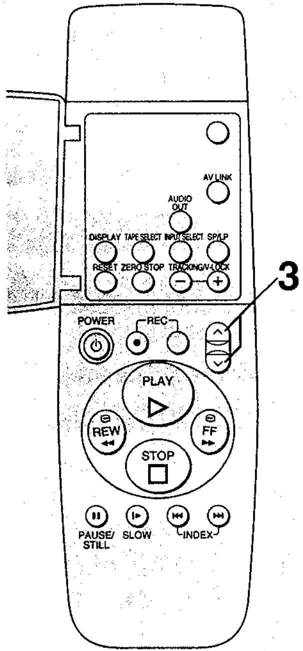


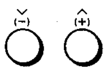
Introduction

The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 99 TV broadcast stations.

Preparation

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and select the programme position except A1, A2 and A3.
- Install the batteries in the remote controller.


AV LINK
AUDIO OUT
DISPLAY
TAPE SELECT
INPUT SELECT
SP/LP
RESET
ZERO STOP
TRACKING/V-LOCK
3
POWER
REC
PLAY
REW
FF
STOP
PAUSE/ STILL
SLOW
INDEX

Operations	Display Symbols	
1 TUNER PRESET		Keep **TUNER PRESET** pressed for more than 2 seconds.
2 		Search for the TV Station. • If the required station is not displayed, press + or − again.
3		Select programme position.
4 SLEEP (SHIFT)		Store the broadcast station. • To store the other stations, repeat steps **2** to **4**.
5 TUNER PRESET		Press **TUNER PRESET**.

Tuning Procedure Using the VTR Only

Stations can be tuned in by following the steps given below.

1 Press **TUNER PRESET** for more than 2 seconds.

2 Search for the TV station by pressing ∧ (+) or ∨ (−), and then press **SP/LP (NEXT)**.

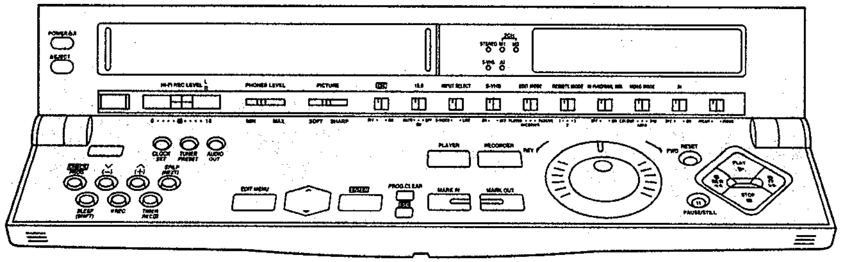
3 Select programme position by using ∧ (+) or ∨ (−).

4 Press **SLEEP (SHIFT)** to store the broadcast station.
  - To store the other stations, press **SP/LP (NEXT)** and then repeat steps **2** to **4**.

5 Press **TUNER PRESET**.

Note:
While tuning, your VTR may lock onto several weak stations from distant transmitters. Should this occur press + or − again until a strong station is received.

Initial Settings Using On Screen Displays

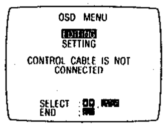


Preparation

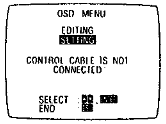
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.
- Ensure that **EDIT MODE** is set to either PLAYER or RECORDER, but not PASSIVE, otherwise On Screen Displays will not work.

On Screen Display

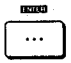
1 Press **EDIT MENU**.

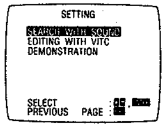

OSD MENU
EDITING
SETTING
CONTROL CABLE IS NOT CONNECTED
SELECT
END

2 Select **SETTING**.


OSD MENU
EDITING
SETTING
CONTROL CABLE IS NOT CONNECTED
SELECT
END

3 Press **ENTER**.

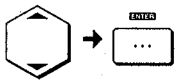


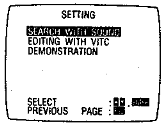

SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
SELECT
PREVIOUS PAGE

To select Sound Setting

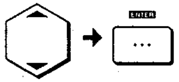
Follow steps **1** to **3** of the above procedure.

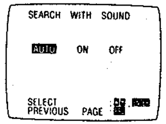
4 Select **SEARCH WITH SOUND**.




SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
SELECT
PREVIOUS PAGE

5 Select the desired setting.



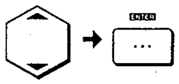

SEARCH WITH SOUND
AUTO
ON
OFF
SELECT
PREVIOUS PAGE

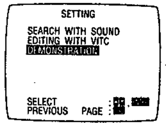
AUTO: The sound can be heard during special playback only when an editing operation is in progress.
ON: The sound can always be heard during special playback.
OFF: The sound can not be heard during special playback i.e. cue, review, slow playback.

To View a Demonstration

Follow steps **1** to **3** of the above procedure.

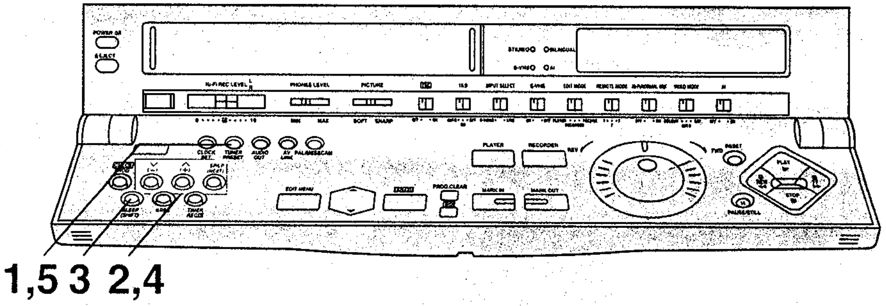
4 Select **DEMONSTRATION**.




SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
SELECT
PREVIOUS PAGE

- The On Screen Displays for editing are displayed one after the other at about five second intervals.

Storing TV Broadcasts into your VTR For AG-4700E



Introduction

The VTR is fitted with its own tuner (just like a normal TV set) and can be pre-set to receive up to 99 TV broadcast stations.

Preparation

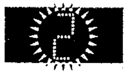
- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR and Select the programme position except A1, A2 and A3.

Operations / Display Symbols

1 TUNER PRESET

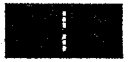
Keep **TUNER PRESET** pressed for more than 2 seconds.

2 ∨ (−) ∧ (+) → SP/LP (NEXT)



Select the programme position, then press **SP/LP (NEXT)**.

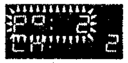
3 SLEEP (SHIFT)



Select normal TV station or Pay TV station.

- 1: To preset normal TV stations.
- 2: To preset Pay TV stations.

4 ∨ (−) ∧ (+)



Search for the required TV station.

- Press **PAL/MESECAM** to select the broadcasting system for the TV station to be tuned.
  PAL: MESECAM indicator should not be lit.
  SECAM: MESECAM indicator should be lit.
- Press **SP/LP (NEXT)** and repeat steps **2–4** for each programme position you want to tune to a station.

5 TUNER PRESET

Press **TUNER PRESET** twice.

Fine Tuning Procedure

1. Keep **TUNER PRESET** pressed for more than 2 seconds, and then press again.
2. Press **SP/LP (NEXT)**.
3. Press ∧ (+) or ∨ (−) to obtain the best tuning condition.
   - "AFC" Indicator disappears.
   - To return the tuning to its former state, press **SLEEP (SHIFT)**.
4. Press **TUNER PRESET**.

Blanking of Unoccupied Programme Positions

1. Keep **TUNER PRESET** pressed for more than 2 seconds.
2. Select a programme position which you do not want to tune to a TV station, by using ∧ (+) or ∨ (−).
3. Press **SLEEP (SHIFT)**. ("––" is displayed.)
   - Repeat steps **2** and **3** for another unoccupied programme positions to skip during the selection of the programme positions.
   - To cancel the blanking of a programme position, select that programme position on the VTR and then press **SLEEP (SHIFT)**.
4. Press **TUNER PRESET** twice.

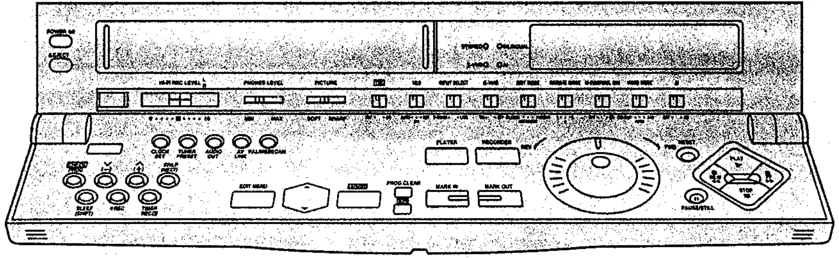
Channel Plan

Channel Indication	TV Channel	
	Germany/Italy	Other Countries
2–12	*E2–E12	E2–E12
13–20	A–H (Only Italy)	——
21–69	21–69	21–69
74–76	——	S1–S3
80–82	——	M1–M3
83–89	S4–S10	M4–M10
90–99	S11–S20	U1–U10
121–141 Hyperband	**S21–S41	S21–S41

*In Italy: H1...(11), H2...(12)
**Only for 8 MHz channel raster

Note:
This VTR does not support NICAM broadcast audio multiplexing.

Initial Settings Using On Screen Displays



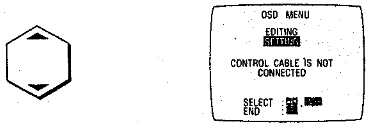
Preparation

- Confirm that the TV is on and the VTR viewing channel is selected.
- Turn on the VTR.

1 Press **EDIT MENU**.

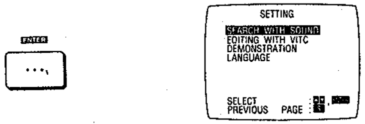
2 Select **SETTING**.

On Screen Display



OSD MENU
EDITING
SETTING
CONTROL CABLE IS NOT CONNECTED
SELECT :
END :

3 Press **ENTER**.

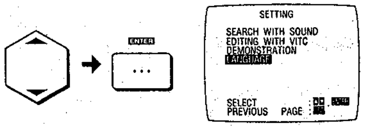


SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
LANGUAGE
SELECT :
PREVIOUS PAGE :

To select the Desired Language

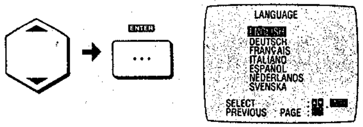
Select one of the seven languages displayed: English, German, French, Italian, Spanish, Dutch and Swedish.
Follow steps **1** to **3** of the above procedure.

4 Select **LANGUAGE**.



SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
LANGUAGE
SELECT :
PREVIOUS PAGE :

5 Select the desired language.

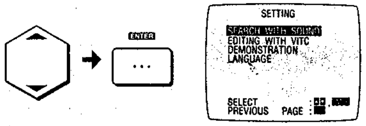


LANGUAGE
ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO
ESPAÑOL
NEDERLANDS
SVENSKA
SELECT :
PREVIOUS PAGE :

To select Sound Setting

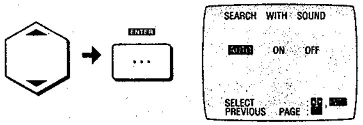
Follow steps **1** to **3** of the above procedure.

4 Select **SEARCH WITH SOUND**.



SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
LANGUAGE
SELECT :
PREVIOUS PAGE :

5 Select the desired setting.



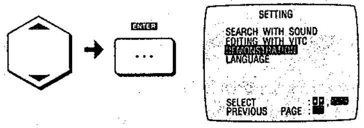
SEARCH WITH SOUND
AUTO ON OFF
SELECT :
PREVIOUS PAGE :

AUTO: The sound can be heard during special playback only when an editing operation is in progress.
ON: The sound can be always heard during special playback.
OFF: The sound can not be heard during special playback.

To View a Demonstration

Follow steps **1** to **3** of the above procedure.

4 Select **DEMONSTRATION**.



SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
LANGUAGE
SELECT :
PREVIOUS PAGE :

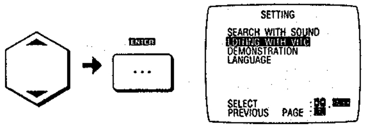
- The On Screen Displays for editing are displayed one after the other at about five second intervals.

VITC (Vertical Interval Time Code) Function

As an address (individual number) is recorded for each frame, it is possible to find the accurate position of any desired scene or picture on a tape by checking the address during playback. This address is called "Time Code".
Since the VITC signals (Vertical Interval Time Code) are recorded together with the picture signals, they will not be cancelled even when the video cassette is taken out from the VTR or the VTR is switched off. This makes it possible to check the precise position of any desired picture at any time.

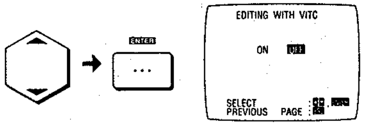
Follow steps **1** to **3** of the above procedure.

4 Select **EDITING WITH VITC**.



SETTING
SEARCH WITH SOUND
EDITING WITH VITC
DEMONSTRATION
LANGUAGE
SELECT :
PREVIOUS PAGE :

5 Select the desired setting.



EDITING WITH VITC
ON OFF
SELECT :
PREVIOUS PAGE :

ON: For reading the VITC signals during playback and writing them during recording.
The time code is indicated on the counter in increments of hours, minutes and seconds. During programme editing, it appears on the screen in increments of hours, minutes, seconds and frames (25 frames per second).
OFF: The normal counter is displayed.

Reading the VITC signals

"–:––.––" appears on the counter when the cassette is inserted. When playback is started, the VITC signals are read and the time code is displayed.

- When VITC signals have not been written on the tape, the time code is not displayed.
- When playing back the tape with VITC signals recorded on another VTR, set **PICTURE** to the center position or **AI** to ON. Otherwise, VITC signals may not be read.

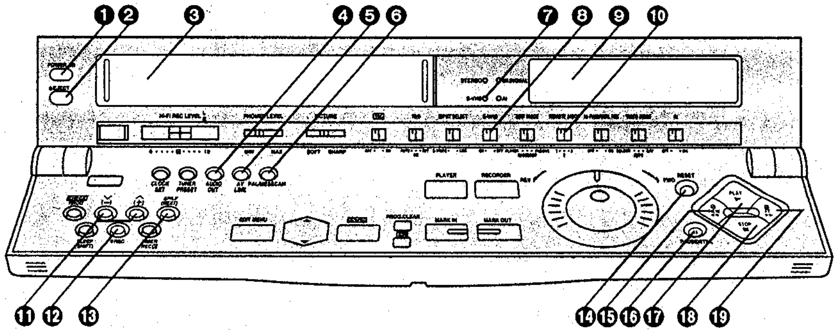
Writing the VITC signals

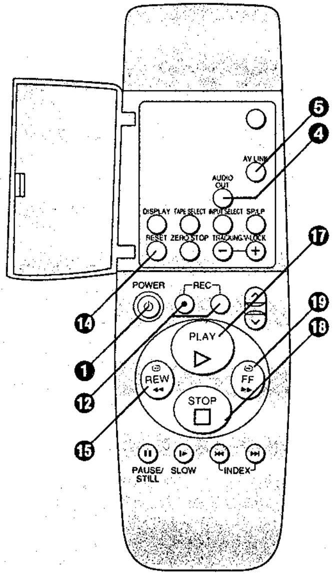
"–:––.––" appears on the counter when the cassette is inserted. When recording is started, the VITC signals are written starting at 0h00m00s00f.
If recording is started after the tape has been played back and the VITC signals read, the VITC signals will be written following on from the time code which is displayed on the counter at that time.

Notes:

- To use the VITC function to edit, be sure to first turn on the VITC function with the procedure described above, then begin editing after cancelling all editing programmes used last time.
- When tracking is out of adjustment, the VITC signals may not be properly read.
- The counter cannot be reset when the VITC function is on. This is because the VITC signals are recorded on the tape.
- Unplugging the AC mains lead returns the VITC setting to OFF.
- Editing using the VITC function cannot be performed with movie cameras which have edit sockets (5-pin).
- The editing accuracy when using the VITC function is approximately ±3 frames. This accuracy decreases to approximately ±8 frames when record and pause are repeated.
- To make optimal use of the advantages offered by the VITC function during editing, this VTR should be connected to another AG-4700 also equipped with the VITC function.
  When this VTR is to be connected to another unit which is not equipped with the VITC function, the editing precision will be increased if the AG-4700 is used as the playback VTR.
- There are two types of frame display: one represents what is read from the VITC signal and the other indicates what is read from the linear counter. This means that when a conventional VTR or a movie camera with no VITC function is used as the player, the frame count on the player will also be displayed when the VITC function is activated on the AG-4700. However, if this frame count is the one which has been read from the linear counter, the editing accuracy will be less than that when a unit with VITC function is used.
- Since this unit does not come with a function for reading the VITC signals of the player, a model equipped with a VITC reading function must be used as the player in order to improve the editing accuracy.

Controls and Connection Sockets For AG-4700E





Basic Controls

❶ POWER ⏻/I
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still connected to the mains.

❷ EJECT
To eject a video cassette.

❸ Cassette Compartment
Insert a video cassette here.

❹ AUDIO OUT
To select the desired sound mode.
At the every push of this button, the audio output mode changes as follows.

→Stereo→Left→Right→Normal audio track—

The Left and Right Indicators show which sound mode is selected in the following way.

Stereo: Both the Left and Right Indicators are lit.
Left: The Left Indicator is lit.
Right: The Right Indicator is lit.
Normal: Both the Left and Right Indicators are not lit.

❺ AV LINK
To select the VTR mode or TV mode for AV LINK.

❻ PAL/MESECAM
Set according to the colour TV system used during recording and playback.
When the MESECAM Indicator is lit, the MESECAM system is selected.

❼ S-VHS Indicator
Lights up when the S-VHS switch is set to ON.

❽ S-VHS
When recording on an S-VHS cassette tape, select the desired recording format with this switch.
ON: The recording will be made in the S-VHS format.
- The S-VHS indicator lights up.

OFF: The recording will be made in the VHS format.
- The S-VHS indicator does not light up.

(It is possible to make a recording on an S-VHS cassette tape in the VHS format, for example, in order to play back the tape on another VHS VTR.)

- When using VHS cassettes, the recording is made in the VHS format irrespective of the position to which this switch is set.
- For playback, it is not necessary to operate this switch.
- When a tape which was recorded in the S-VHS format is played back on a conventional VHS VTR, it is not possible to obtain playback picture.

❾ Display

❿ REMOTE MODE
VTR1: Set to this position.
VTR2: No function.
VTR3: No function.

⓫ ∨(−) ∧(+)
To select the required programme position (TV station).
To set the clock and timer recording.

⓬ REC
To start a recording.

⓭ SP/LP (NEXT)
To select the tape speed required for recording.
SP gives the best picture quality.
LP gives the longest recording time.
To proceed to the next item during setting procedure.

⓮ RESET
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

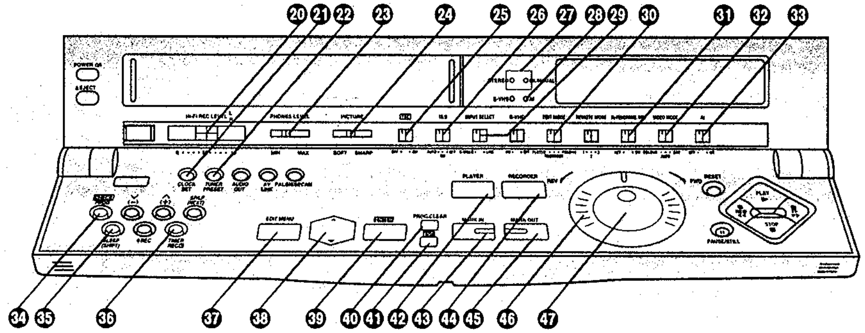
⓯ REW (REWIND)
In the stop mode: To rewind the tape.
In the playback mode: To search backward.
In the rewind mode: To obtain high speed picture.
"◁◁" is lit.

⓰ PAUSE/STILL
In the stop mode: Still picture (Jog/Shuttle mode)
During playback: Still picture (Jog/Shuttle mode)
During recording: To interrupt recording

⓱ PLAY
To start playback. "▷" is lit.

⓲ STOP
To stop any playback or recording.

⓳ FF (FAST FORWARD)
In the stop mode: To fast forward the tape.
In the playback mode: To search forward.
In the fast forward mode: To obtain high speed picture.
"▷▷" is lit.



Advanced Controls

⑳ **Hi-Fi REC LEVEL**
To adjust the recording level to peak at +4 dB on the recording level indicator.

㉑ **CLOCK SET**
To set the time.

㉒ **TUNER PRESET**
To initiate TV station settings for the tuner.

㉓ **PHONES LEVEL**
For adjusting the volume level of connected stereo headphones.

㉔ **PICTURE**
To make picture sharper (SHARP) or softer (SOFT).

㉕ **TBC**
When the tape in the cassette is loose or damaged, or when the tape movement is unstable during recording or playback, the playback picture may shake from side to side and the picture may become distorted. In this case, activate the Time Base Corrector by setting the TBC Switch to ON, and the picture will become stable and the shaking will be minimized.
- For normal use, set the TBC Switch to OFF.
- During playback of some pre-recorded tapes, the tape may shake vertically. In such a case, set the TBC Switch to OFF.
- This function only works during normal playback in the PAL system.

㉖ **16:9**
AUTO: For automatically identifying the pictures as 16:9 pictures or 4:3 pictures during recording and playback and showing them on the wide TV screen.
- Normally set at this position.

ON: For recording and playback in such a way that the pictures expanded to 16:9 are shown on the wide TV screen at all time.
OFF: For recording and playback in such a way that 4:3 pictures are shown on the wide or 4:3 TV screen at all times.

㉗ **STEREO and BILINGUAL Indicators**
When receiving a TV programme, the type of sound system in which it is broadcast is automatically indicated.

㉘ **AI Indicator**
Lights up when the AI function is on.

㉙ **INPUT SELECT**
When Recording via the AV3 sockets on the front panel, select A3 by pressing ∧ ∨ and set this switch to S-VIDEO or LINE.
S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
LINE: Through the VIDEO IN and AUDIO IN sockets

㉚ **EDIT MODE**
PLAYER: When this VTR is used as the playback VTR during editing operations.
RECORDER: When this VTR is used as the recording VTR during editing operations.
- Normally set at this position.

PASSIVE: When operating this VTR using another VTR or an editing controller.
- The picture quality best suited for editing is selected.
- When setting at this position, operation will not be possible and the On Screen Display will not appear.

㉛ **Hi-Fi/NORMAL MIX**
OFF: Normally set at this position to reproduce the better sound available from the Hi-Fi track.
ON: Both sound tracks (the Hi-Fi sound track and the normal sound track) are played back mixed together. Use this setting when playing back a cassette tape which has been insert edited or audio dubbed.

㉜ **VIDEO MODE**
COLOUR: When performing recording and playback in colour.
AUTO: The VTR automatically distinguishes between colour and black-and-white during recording and playback.
B/W: When performing recording and playback in black-and-white.

㉝ **AI**
ON: Using the AI function, recording and playback are performed in the state which achieves optimum picture quality in light of characteristics of a tape.
- The picture sharpness cannot be adjusted in this setting.

OFF: Turns off the AI function.

㉞ **CHECK/PROG**
To select a timer programme number.
"1, 2, 3... or 8" is lit.
To display details of preset timer recording.

㉟ **SLEEP (SHIFT)**
To set the time to turn off the VTR automatically.
To blank unoccupied programme position.

㊱ **TIMER REC**
To turn the timer recording function on and off.
⊡ is lit or not lit.
Once Operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

㊲ **EDIT MENU**
To perform editing operations.

㊳ **▲▼**
To make selections from On Screen Display.

㊴ **ENTER**
To make selections from On Screen Display.

㊵ **PROG. CLEAR**
To cancel an editing programme.

㊶ **ESC**
To return to the previous page on the screen.
To stop editing.

㊷ **PLAYER**
To operate the playback VTR.

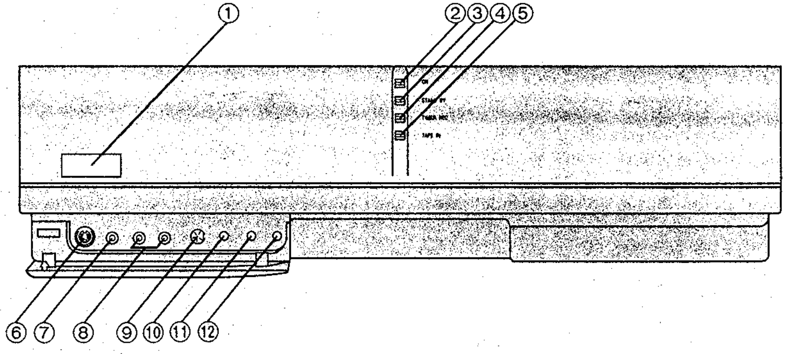
㊸ **MARK IN**
To set the edit start point.

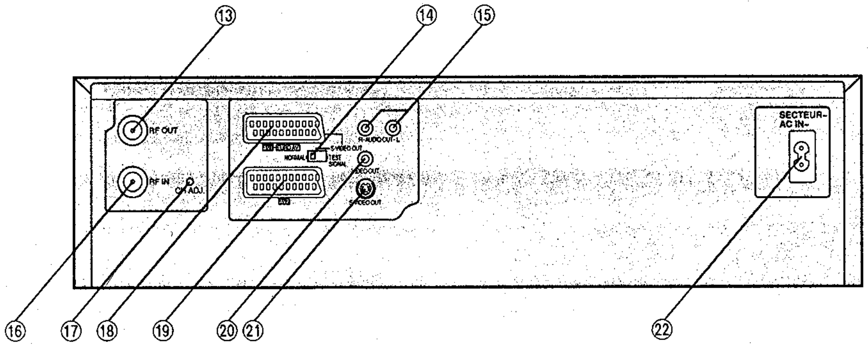
㊹ **RECORDER**
To operate the recording VTR.

㊺ **MARK OUT**
To set the edit end point.

㊻ **Shuttle Ring**
To adjust playback speed backward or forward.

㊼ **Jog Dial**
To locate any desired frame with utmost precision.





① **Infrared Remote Control Receiver Window**

② **ON Indicator**
Lights up when the VTR is turned on.

③ **STAND BY Indicator**
Lights up when the AC mains lead is connected and the VTR is turned off.

④ **TIMER REC Indicator**
Lights up when the timer recording function is on.

⑤ **TAPE IN Indicator**
Lights up when a cassette is inserted.

⑥ **S-VIDEO IN (AV3)**
To connect the S-Video cable to a movie camera or to another VTR that has a S-Video output socket.

⑦ **VIDEO IN (AV3)**
To connect the video cable to a movie camera or to another VTR.

⑧ **AUDIO IN (AV3)**
To connect the audio cable to a movie camera or to another VTR.

⑨ **EDIT (5 pin)**
To connect another VTR equipped with an edit socket or an editing controller.

⑩ **SYNC. EDIT**
To connect a movie camera or another VTR equipped with synchronized editing capability.

⑪ **MIC**
To connect a microphone for recording. Once connected, this socket has priority.

⑫ **PHONES**
To connect stereo headphones.

⑬ **RF OUT**
To connect to the aerial terminal on a TV set.

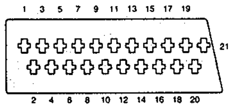
⑭ **NORMAL/S-VIDEO OUT/TEST SIGNAL**
NORMAL: Normally set to this position.
S-VIDEO OUT (AV1):
Set to this position when connecting the VTR to a TV set equipped with 21-pin Euro-AV Connector with pins for separate Y/C signal input.
TEST SIGNAL:
Set to this position when tuning the TV into the VTR.
The test signal is transmitted on channel 36 and AV1.

⑮ **AUDIO OUT**
To connect the audio cable to a TV or another VTR.

⑯ **RF IN**
To connect to the external aerial.

⑰ **CH ADJ.**
To adjust the RF transmitting channel 32~40.

⑱ **AV1**
This 21-pin scart terminal carries input and output signals for both picture and sound. TV sets equipped with a similar socket can be connected here.
This is also called Scart
Peritel
Euro Connector
Euro AV



	NORMAL (AV1/AV2)		S-VIDEO (AV1)
1	AUDIO OUTPUT CH2 (R)	1	AUDIO OUTPUT CH2 (R)
2	AUDIO INPUT CH2 (R)	2	AUDIO INPUT CH2 (R)
3	AUDIO OUTPUT CH1 (L)	3	AUDIO OUTPUT CH1 (L)
4	AUDIO GND	4	AUDIO GND
5	BLUE GND	5	No connection
6	AUDIO INPUT CH1 (L)	6	AUDIO INPUT CH1 (L)
7	BLUE	7	No connection
8	SWITCHING VOLTAGE	8	SWITCHING VOLTAGE
9	GREEN GND	9	No connection
10	No connection	10	No connection
11	GREEN	11	No connection
12	No connection	12	No connection
13	RED GND	13	No connection
14	BLANKING GND	14	No connection
15	RED	15	C OUT
16	BLANKING	16	No connection
17	VIDEO OUTPUT GND	17	VIDEO OUTPUT GND
18	VIDEO INPUT GND	18	No connection
19	VIDEO OUTPUT	19	Y OUT
20	VIDEO INPUT	20	VIDEO INPUT
21	GND	21	GND

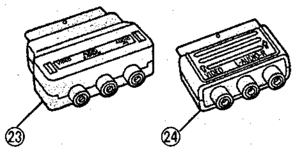
Caution: RGB reservation for only E/E operation when connecting the Pay TV decoder

⑲ **AV2**
To connect to a decoder or another VTR.
●Only used as the input socket.

⑳ **VIDEO OUT**
To connect the video cable to a TV or another VTR.

㉑ **S-VIDEO OUT**
To connect the S-Video cable to a TV or another VTR that has a S-Video input socket.

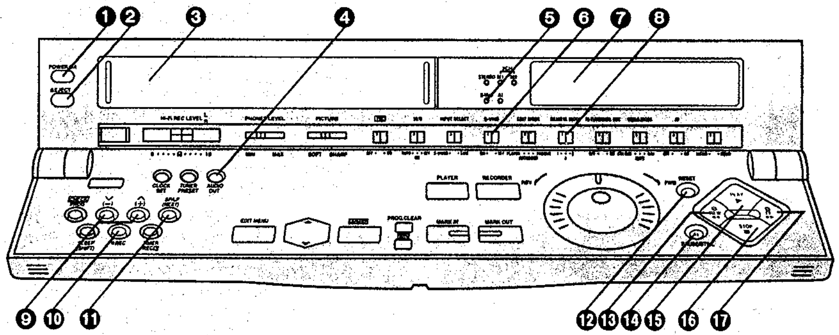
㉒ **AC IN~**
To connect to the main power supply.

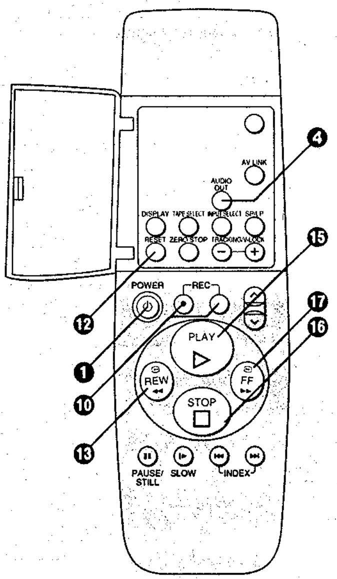


㉓ **21 pin—Phono Transformer Adaptor (Output)**
Inserting this adaptor into AV1 allows it to be used as the Phono Audio/Video output socket.
VIDEO: To connect the video cable to a TV or another VTR.
AUDIO (L/MONO, R): To connect the audio cable to a TV or another VTR.

㉔ **21 pin—Phono Transformer Adaptor (Input)**
Inserting this adaptor into AV1 or AV2 allows it to be used as the Phono Audio/Video input socket.
VIDEO: To connect the video cable to a movie camera or another VTR.
AUDIO (L/R): To connect the audio cable to a movie camera or another VTR.

Controls and Connection Sockets For AG-4700B





Basic Controls

❶ **POWER ⏻/I**
Press to switch the unit on from standby mode or vice versa. In standby mode, the unit is still connected to the mains.

❷ **EJECT**
To eject a video cassette.

❸ **Cassette Compartment**
Insert a video cassette here.

❹ **AUDIO OUT**
To select the desired sound output mode.
At every push of this button, the sound output mode changes as follows.

→Stereo→Left→Right→Normal audio track—┐

The Left and Right Indicators show which sound mode is selected in the following way.

Stereo: Both the Left and Right Indicators are lit.
Left: The Left Indicator is lit.
Right: The Right Indicator is lit.
Normal: Both the Left and Right Indicators are not lit.

❺ **S-VHS Indicator**
Lights up when the S-VHS switch is set to ON.

❻ **S-VHS**
When recording on an S-VHS cassette tape, select the desired recording format with this switch.
ON: The recording will be made in the S-VHS format.
- The S-VHS indicator lights up.

OFF: The recording will be made in the VHS format.
- The S-VHS indicator does not light up.

(It is possible to make a recording on an S-VHS cassette tape in the VHS format, for example, in order to play back the tape on another VHS VTR.)

- When using VHS cassettes, the recording is made in the VHS format irrespective of the position to which this switch is set.
- For playback, it is not necessary to operate this switch.
- When a tape which was recorded in the S-VHS format is played back on a conventional VHS VTR, it is not possible to obtain playback picture.

❼ **Display**

❽ **REMOTE MODE**
VTR1: Set to this position.
VTR2: No function.
VTR3: No function.

❾ **∨ (−) ∧ (+)**
To select the required programme position (TV station).
To set the clock and timer recording.

❿ **REC**
To start a recording.

⓫ **SP/LP (NEXT)**
To select the tape speed required for recording.
SP gives the best picture quality.
LP gives the longest recording time.
To proceed to the next item during setting procedure.

⓬ **RESET**
To reset the tape counter (elapsed time) to "0:00.00".
- The tape counter is automatically reset to "0:00.00" when a video cassette is inserted.

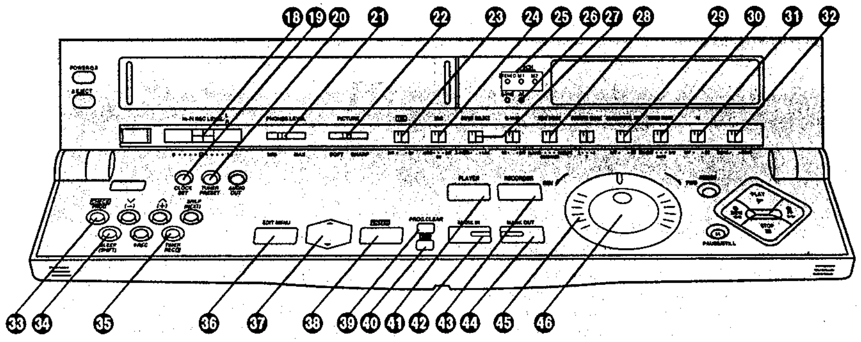
⓭ **REW (REWIND)**
In the stop mode: To rewind the tape.
In the playback mode: To search backward.
In the rewind mode: To obtain high speed picture.
"◁◁" is lit.

⓮ **PAUSE/STILL**
In the stop mode: Still picture (Jog/Shuttle mode)
During playback: Still picture (Jog/Shuttle mode)
During recording: To interrupt recording

⓯ **PLAY**
To start playback. "▷" is lit.

⓰ **STOP**
To stop any playback or recording.

⓱ **FF (FAST FORWARD)**
In the stop mode: To fast forward the tape.
In the playback mode: To search forward.
In the fast forward mode: To obtain high speed picture.
"▷▷" is lit.



Advanced Controls

⑱ **Hi-Fi REC LEVEL**
To adjust the recording level to peak at +4 dB on the recording level indicator.

⑲ **CLOCK SET**
To set the time.

⑳ **TUNER PRESET**
To initiate TV station settings for the tuner.

㉑ **PHONES LEVEL**
For adjusting the volume level of connected stereo headphones.

㉒ **PICTURE**
To make picture sharper (SHARP) or softer (SOFT).

㉓ **TBC**
When the tape in the cassette is loose or damaged, or when the tape movement is unstable during recording or playback, the playback picture may shake from side to side and the picture may become distorted. In this case, activate the Time Base Corrector by setting the TBC Switch to ON, and the picture will become stable and the shaking will be minimized.
- For normal use, set the TBC Switch to OFF.
- During playback of some pre-recorded tapes, the tape may shake vertically. In such a case, set the TBC Switch to OFF.
- This function only works during normal playback in the PAL system.

㉔ **16:9**
AUTO: For automatically identifying the pictures as 16:9 pictures or 4:3 pictures during recording and playback and showing them on the wide TV screen.
- Normally set at this position.

ON: For recording and playback in such a way that the pictures expanded to 16:9 are shown on the wide TV screen at all time.
OFF: For recording and playback in such a way that 4:3 pictures are shown on the wide or 4:3 TV screen at all times.

㉕ **STEREO, M1 and M2 Indicators**
When receiving a TV programme, the type of sound system in which it is broadcast is automatically indicated.

㉖ **AI Indicator**
Lights up when the AI function is on.

㉗ **INPUT SELECT**
When Recording via the AV3 sockets on the front panel, select A3 by pressing ∧ ∨ and set this switch to S-VIDEO or LINE.
S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
LINE: Through the VIDEO IN and AUDIO IN sockets

㉘ **EDIT MODE**
PLAYER: When this VTR is used as the playback VTR during editing operations.
RECORDER: When this VTR is used as the recording VTR during editing operations.
- Normally set at this position.

PASSIVE: When operating this VTR using another VTR or an editing controller.
- The picture quality best suited for editing is selected.
- When setting at this position, operation will not be possible and the On Screen Display will not appear. (See page 36 for details.)

㉙ **HI-FI/NORMAL MIX**
OFF: Normally set at this position to reproduce the better sound available from the Hi-Fi track.
ON: Both sound tracks (the Hi-Fi sound track and the normal sound track) are played back mixed together. Use this setting when playing back a cassette tape which has been insert edited or audio dubbed.

㉚ **VIDEO MODE**
COLOUR: When performing recording and playback in colour.
AUTO: The VTR automatically distinguishes between colour and black-and-white during recording and playback.
B/W: When performing recording and playback in black-and-white.

㉛ **AI**
ON: Using the AI function, recording and playback are performed in the state which achieves optimum picture quality in light of characteristics of a tape.
- The picture sharpness cannot be adjusted in this setting.

OFF: Turns off the AI function.

㉜ **NICAM/MONO**
NICAM: Normally set at this position.
MONO: Only set at this position to record the normal sound during a NICAM broadcast or if the stereo sound is distorted due to inferior reception conditions.

㉝ **CHECK/PROG**
To select a timer programme number.
"1, 2, 3... or 8" is lit.
To display details of preset timer recording.

㉞ **SLEEP (SHIFT)**
To set the time to turn off the VTR automatically.
To store a programme position.

㉟ **TIMER REC**
To turn the timer recording function on and off.
⏲ is lit or not lit.
Once Operating timer recording function, the normal VTR operation is not possible unless this button is set to off.

㊱ **EDIT MENU**
To perform editing operations.

㊲ **▲▼**
To make selections from On Screen Display.

㊳ **ENTER**
To make selections from On Screen Display.

㊴ **PROG. CLEAR**
To cancel an editing programme.

㊵ **ESC**
To return to the previous page on the screen.
To stop editing.

㊶ **PLAYER**
To operate the playback VTR.

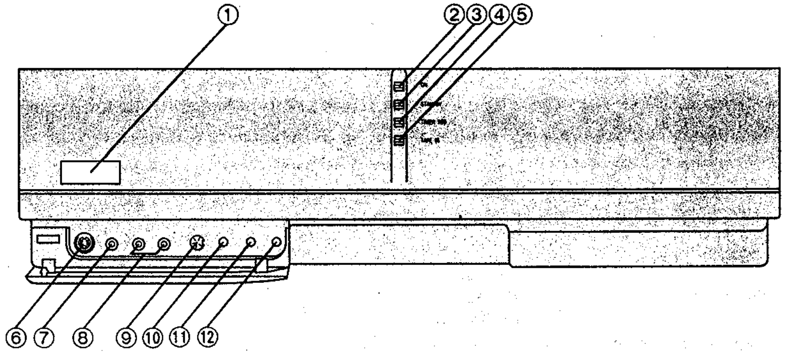
㊷ **MARK IN**
To set the edit start point.

㊸ **RECORDER**
To operate the recording VTR.

㊹ **MARK OUT**
To set the edit end point.

㊺ **Shuttle Ring**
To adjust playback speed backward or forward.

㊻ **Jog Dial**
To locate any desired frame with utmost precision.



① **Infrared Remote Control Receiver Window**

② **ON Indicator**
Lights up when the VTR is turned on.

③ **STANDBY Indicator**
Lights up when the AC mains lead is connected and the VTR is turned off.

④ **TIMER REC Indicator**
Lights up when the timer recording function is on.

⑤ **TAPE IN Indicator**
Lights up when a cassette is inserted.

⑥ **S-VIDEO IN (AV3)**
To connect the S-Video cable to a movie camera or to another VTR that has a S-Video output socket.

⑦ **VIDEO IN (AV3)**
To connect the video cable to a movie camera or to another VTR.

⑧ **AUDIO IN (AV3)**
To connect the audio cable to a movie camera or to another VTR.

⑨ **EDIT (5 pin)**
To connect another VTR equipped with an edit socket or an editing controller.

⑩ **SYNC. EDIT**
To connect a movie camera or another VTR equipped with synchronized editing capability.

⑪ **MIC**
To connect a microphone for recording. Once connected, this socket has priority over other input terminals.

⑫ **PHONES**
To connect stereo headphones.

⑬ **RF OUT**
To connect to the aerial terminal on a TV set.

⑭ **LEVEL**
Used to adjust the UHF aerial signal strength.
HIGH: For normal position.
LOW: If a diagonal pattern or stripes appear on the picture.

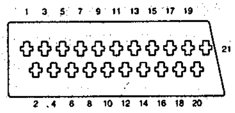
⑮ **NORMAL/S-VIDEO OUT/TEST SIGNAL**
NORMAL: Normally set to this position.
S-VIDEO OUT (AV1):
Set to this position when connecting the VTR to a TV set equipped with 21-pin AV Connector with pins for separate Y/C signal input.
TEST SIGNAL:
Set to this position when tuning the TV into the VTR.
The test signal is transmitted on channel 36 and AV1.

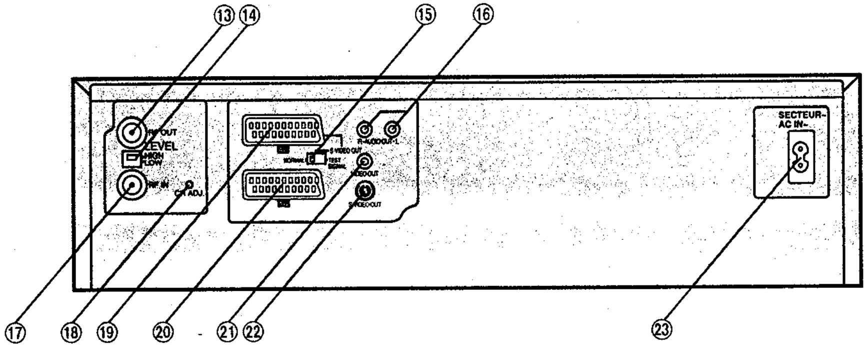
⑯ **AUDIO OUT**
To connect the audio cable to a TV or another VTR.

⑰ **RF IN**
To connect to the external aerial.

⑱ **CH ADJ.**
To adjust the RF transmitting channel 30~42.

⑲ **AV1**
This 21-pin scart terminal carries input and output signals for both picture and sound. TV sets equipped with a similar socket can be connected here.
This is also called Scart
Peritel
Euro Connector
Euro AV





NORMAL (AV1/AV2)	S-VIDEO (AV1)
1 AUDIO OUTPUT CH2 (R)	1 AUDIO OUTPUT CH2 (R)
2 AUDIO INPUT CH2 (R)	2 AUDIO INPUT CH2 (R)
3 AUDIO OUTPUT CH1 (L)	3 AUDIO OUTPUT CH1 (L)
4 AUDIO GND	4 AUDIO GND
5 BLUE GND	5 No connection
6 AUDIO INPUT CH1 (L)	6 AUDIO INPUT CH1 (L)
7 BLUE OUTPUT (AV1) BLUE INPUT (AV2)	7 No connection
8 SWITCHING VOLTAGE	8 SWITCHING VOLTAGE
9 GREEN GND	9 No connection
10 No connection	10 No connection
11 GREEN OUTPUT (AV1) GREEN INPUT (AV2)	11 No connection
12 No connection	12 No connection
13 RED GND	13 No connection
14 BLANKING GND	14 No connection
15 RED OUTPUT (AV1) RED INPUT (AV2)	15 C OUT
16 BLANKING	16 No connection
17 VIDEO OUTPUT GND	17 VIDEO OUTPUT GND
18 VIDEO INPUT GND	18 No connection
19 VIDEO OUTPUT	19 Y OUT
20 VIDEO INPUT	20 VIDEO INPUT
21 GND	21 GND

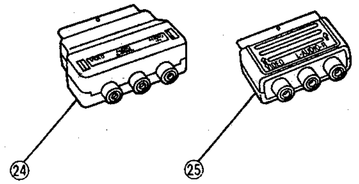
Note: Signals connected to AV2 will be automatically output to AV1 when the VTR is in standby mode, regardless of input select setting.

⑳ **AV2**
To connect to a satellite receiver or another VTR.
•Only used as the input socket.

㉑ **VIDEO OUT**
To connect the video cable to a TV or another VTR.

㉒ **S-VIDEO OUT**
To connect the S-Video cable to a TV or another VTR that has a S-Video input socket.

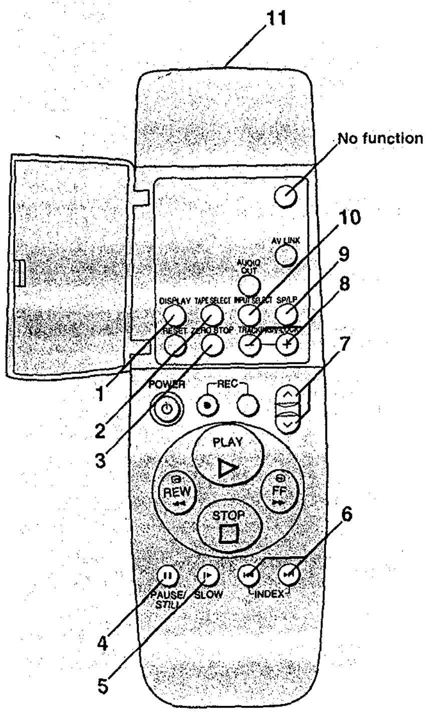
㉓ **AC IN~**
To connect to the main power supply.



㉔ **21 pin—Phono Transformer Adaptor (Output)**
Inserting this adaptor into AV1 allows it to be used as the Phono Audio/Video output socket.
VIDEO: To connect the video cable to a TV or another VTR.
AUDIO (L/MONO, R): To connect the audio cable to a TV or another VTR.

㉕ **21 pin—Phono Transformer Adaptor (Input)**
Inserting this adaptor into AV1 or AV2 allows it to be used as the Phono Audio/Video input socket.
VIDEO: To connect the video cable to a movie camera or another VTR.
AUDIO (L/R): To connect the audio cable to a movie camera or another VTR.

Infra-red Remote Controller



1 **DISPLAY**
To change the indication on the VTR Display.
→Clock→Counter→Remaining Tape Time→

2 **TAPE SELECT**
To set the cassette tape length in order to obtain correct indication of the remaining tape time.
E195: For E30, -60, -90, -120, -180 and -195 tapes
E240: For E240 tape
E260: For E260 and -300 tapes

3 **ZERO STOP**
For the zero stop function.

4 **PAUSE/STILL**
During playback: Still picture
During recording: To interrupt recording

5 **SLOW**
To activate slow playback.

6 **INDEX**
For the index search function.

7 ∨∧
To select the required programme position (TV station) of the VTR.

8 **TRACKING/V-LOCK**
For manual tracking adjustment
The + and – buttons are used to adjust the tracking when, for example, noise bars on the picture are better removed manually than by the automatic digital tracking control. After making a manual adjustment, press both buttons together to return to automatic digital tracking control.

For slow tracking adjustment
When noise bars appear during Still, Still Advance or Slow playback, switch over to slow playback and adjust with the + or – Button to reduce the noise bars.

For vertical locking adjustment
Use the + and – buttons to minimize any vertical jitter during still-picture playback.

9 **SP/LP**
To select the tape speed desired for recording.

10 **INPUT SELECT**
To select the "A1", "A2" or "A3" external recording source.

11 **Infra-red Transmitter**

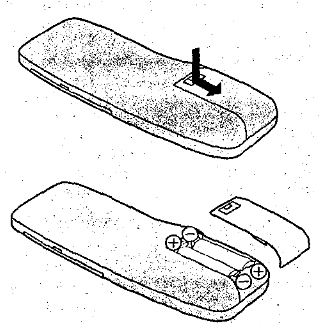
Power Source for the Remote Controller

The remote controller is powered by 2 "UM3" or "R6" size batteries. The life of the batteries is about one year, although this depends on the frequency of use.

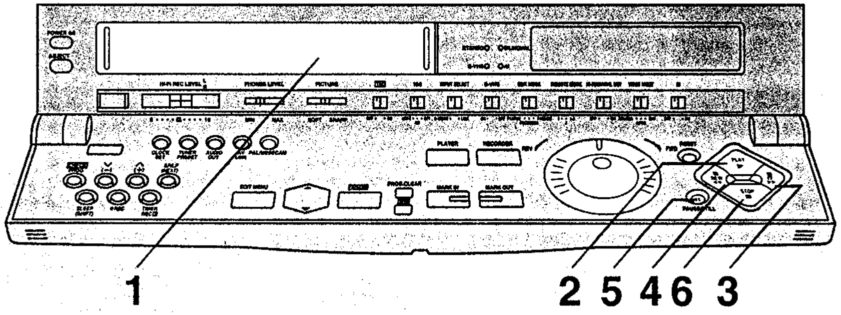
Precautions for Battery Replacement

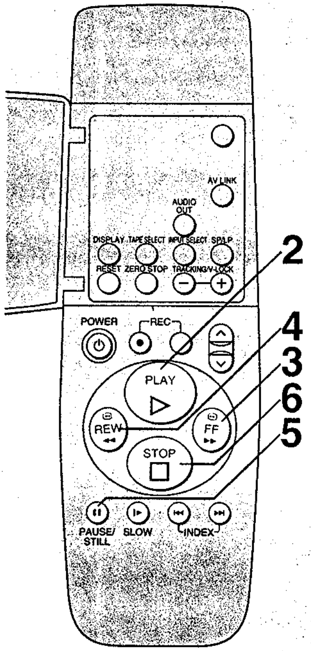
- Load the new batteries with their polarity (⊕ and ⊖) aligned correctly.
- Do not apply heat to the batteries, or an internal short-circuit may occur.
- If you do not intend to use the remote controller for a long period of time, remove the batteries and store them in a cool and dry place.
- Remove spent batteries immediately and dispose of them.
- Do not use an old and a new battery together, and never use an alkaline battery with a manganese battery.

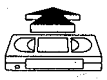
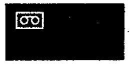
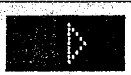
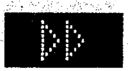
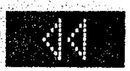
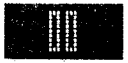
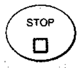
Installing the Batteries



Playback




AV LINK
AUDIO OUT
DISPLAY
TAPE SELECT
INPUT SELECT
SP/LP
RESET
ZERO STOP
TRACKING/V-LOCK
POWER
REC
PLAY
REW
FF
STOP
PAUSE/ STILL
SLOW
INDEX
2
4
3
6
5

Operations	Display Symbols	
1 		Insert a recorded cassette tape.
2		Start viewing the picture.
3		Search forward by tapping **FF**. • To change back to normal playback, press **PLAY**.
4		Search backward by tapping **REW**. • To change back to normal playback, press **PLAY**.
5 PAUSE/ STILL		View a still picture. • To continue the normal playback, press **PLAY** or **PAUSE/STILL**.
6 		Stop viewing the picture.

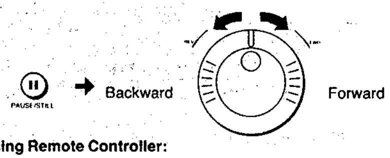
Other Playback Functions

To change the Playback Speed

Using Shuttle Ring:

1 Press **PAUSE/STILL** on the VTR.

2 Rotate Shuttle Ring.


PAUSE/STILL
Backward
Forward

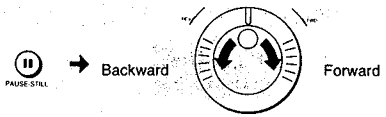
Using Remote Controller:

Press **SLOW** during playback to activate slow playback.

To locate the Desired Picture exactly

1 Press **PAUSE/STILL** on the VTR.

2 Turn Jog Dial.


PAUSE/STILL
Backward
Forward

To obtain High Speed Picture during Fast Forward or Rewind

Keep **FF** pressed during fast forward.

Keep **REW** pressed during rewind.

To return to a Specified Scene

1 Press **RESET** to set the counter to 0:00.00.

2 After playback, press **ZERO STOP** in the stop mode.

- The tape will be rewound or fast forwarded to 0:00.00.

VHS Index Search System

It is very easy to find the beginning of each recording, because a special index signal is recorded at the start of each recorded segment on the tape.

For example:

Searching for the 2nd recorded segment in the forward direction.

Press **INDEX ►►I** twice.

- After finding the specific recorded segment, playback starts automatically.
- For the reverse direction, press **INDEX I◄◄**.
- Up to 20 programmes can be searched for in both directions.

Recording Index Signals

Index signals are recorded in following cases.

WRITE indicator appears on the Display.

- When a recording is started by pressing **REC**.
- When **REC** is pressed during recording.
- When timer recording is activated.

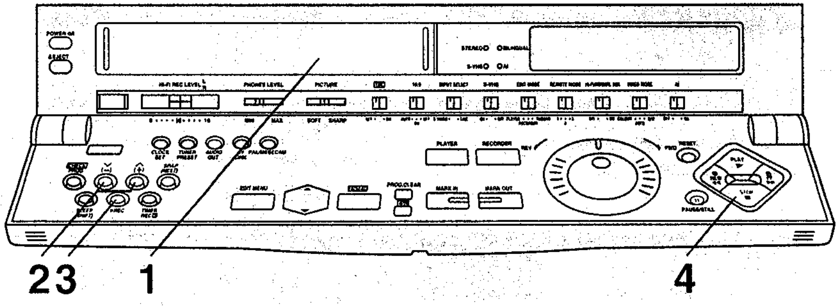
Note:

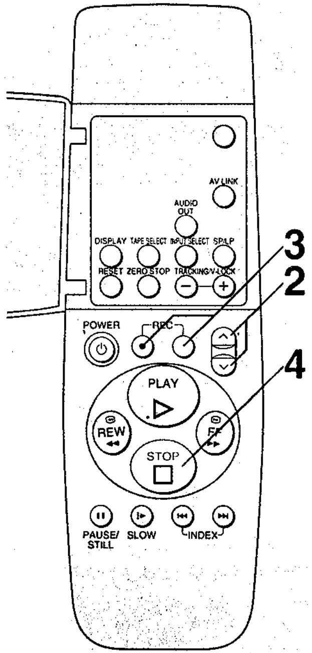
- During Playback, set **PAL/MESECAM**. **(AG-4700E only)**

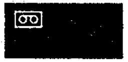
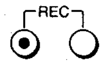
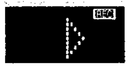
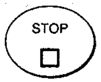
PAL:	When playing back a tape recorded in the PAL system
MESECAM:	When playing back a tape recorded in the MESECAM system MESECAM Indicator lights up.

- Audio reproduction of linear (conventionally recorded) tapes will be monaural when played back on the FM Hi-Fi video recorders.
- Cue or review playback will be automatically released after 10 minutes, and still or slow playback after 5 minutes.
- The index search function can only work correctly, if the index signals are spaced at least 3 minutes apart in the SP mode and 5 minutes apart in the LP mode.

On-the-spot Recording




AV LINK
AUDIO OUT
DISPLAY
TAPE SELECT
INPUT SELECT
SP/LP
RESET
ZERO STOP
TRACKING/V-LOCK
POWER
REC
PLAY
REW
FF
STOP
PAUSE/STILL
SLOW
INDEX
3
2
4

Operations	Display Symbols	
1		Insert a cassette tape. •If it has already been inserted, press **POWER** to turn the VTR on.
2		Select TV station.
3  REC		Start recording.
4  STOP		Stop recording.

To select the Desired Tape Speed

Press **SP/LP** before recording.

To interrupt Recording

Press **PAUSE/STILL** during recording.
Press again to continue recording.

PAUSE/
STILL

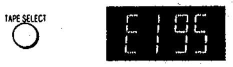
To record One TV Programme while Viewing Another Programme

1 Refer to the on-the-spot recording operations steps **1** to **3**.

2 Select the TV programme on your TV set you wish to view at the present time.

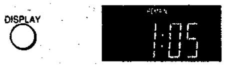
To display the Approximate Remaining Tape Time

1 Press **TAPE SELECT** to select the corresponding cassette tape length.


TAPE SELECT
E 195

E195: For E30, -60, -90, -120, -180 and -195 tapes
E240: For E240 tape
E260: For E260 and -300 tapes

2 Press **DISPLAY**.


DISPLAY
1:05

→Clock→Counter→**Remaining Tape Time**

•The remaining tape time may not be displayed correctly depending on the tape used.

Recording of Stereo and Bilingual Programmes (AG-4700E only)

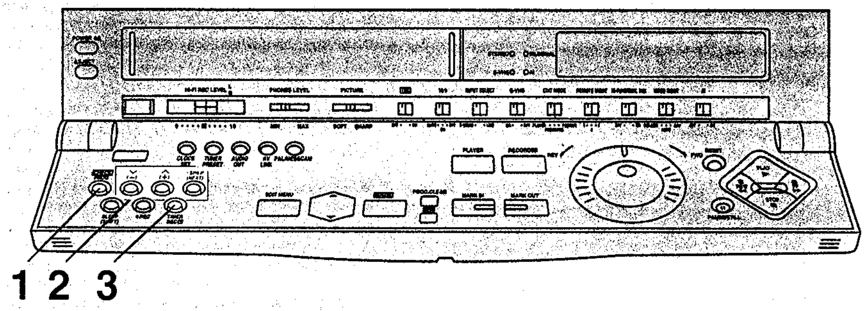
1 Recordings are automatically made in the stereo or bilingual mode. This prevents errors in the selection of the dubbed or the original language.
2 During playback press **AUDIO OUT** to select the desired language. See page 40.

•This VTR does not support NICAM broadcast audio multiplexing.

Notes:

- When a video cassette with a broken off tab is inserted, the "▭" indication will flash to indicate that recording is not possible.
- The recording pause mode will be automatically released after 5 minutes, and be back to the stop mode.

Timer Recording



Up to 8 timer programmes can be recorded up to one month in advance by setting the timer, including daily and weekly programmes.

Preparation

Insert a cassette tape with an intact erasure prevention tab.

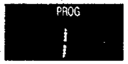
For Example:

Timer programme number;	1
Programme position (channel);	2
Date;	27th, October
Starting time;	20:02
Ending time;	21:30

(present date; 16th October)

Operations **Display Symbols**

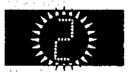
1 CHECK PROG



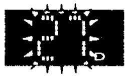
Select **Timer programme number** "1".

2 Set each item by pressing ∧ (+) or ∨ (−) and **SP/LP (NEXT)**.

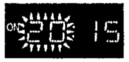
∨ (−) ∧ (+)



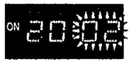
Set **Programme position** (channel) "2".



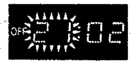
Set **Date** "27".
- For daily and weekly recording, see next page.



Set **Starting time** (hour) "20".

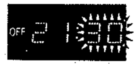


Set **Starting time** (minute) "02".



Set **Ending time** (hour) "21".

SP/LP (NEXT)



Set **Ending time** (minute) "30".
- There is no need to press **SP/LP (NEXT)**.

3 TIMER REC

To activate timer recording, press **TIMER REC.**

Setting for Daily and Weekly Timer Recording

In the Date setting step, press ∨ (−) repeatedly until the desired day (days) is displayed.

Daily recording From Sunday to Saturday	SU MO TU WE TH FR SA
From Monday to Saturday	MO TU WE TH FR SA
From Monday to Friday	MO TU WE TH FR
Weekly recording For example, Sunday	SU

Timer Recording from External Signal Source

If Timer Recording is performed by a unit connected to the AV1/AV2 Socket or the Audio/Video/S-Video input sockets, select the A1, A2 or A3 indicator for the programme position.

A1: Through the AV1 socket
A2: Through the AV2 socket
A3: Through the AV3 sockets on front panel
Set **INPUT SELECT** on the VTR.
S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
LINE: Through the VIDEO IN and AUDIO IN sockets

Selecting the Desired Tape Speed

After step **2**, press **SP/LP (NEXT)** and select SP or LP by pressing ∧ (+) or ∨ (−).

Setting other Programmes in Succession

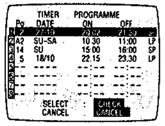
Repeat steps **1** and **2**.

Checking a Timer Programme

Select the timer programme number to be checked by pressing **CHECK/PROG.**

On Screen Display

CHECK PROG



TIMER PROGRAMME

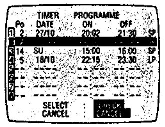
	Po	DATE	ON	OFF	
1	2	27/10	20:02	21:30	SP
2	A2	SU-SA	10:30	11:00	LP
3	14	SU	15:00	16:00	SP
4	5	18/10	22:15	23:30	LP
5	--	----	--:--	--:--	
6	--	----	--:--	--:--	
7	--	----	--:--	--:--	
8	--	----	--:--	--:--	

SELECT : CHECK
CANCEL : CANCEL

Cancelling a Timer Programme

1. Press **TIMER REC** to turn off the timer recording function.
2. Select the timer programme number to be canceled by pressing **CHECK/PROG.**
3. Press ∧ (+) and ∨ (−) simultaneously for more than 3 seconds.

∨ (−) ∧ (+)



TIMER PROGRAMME

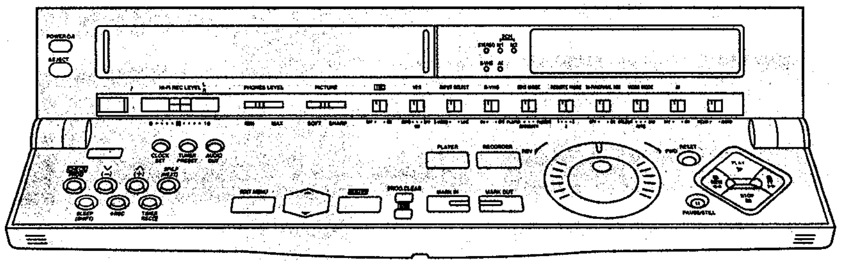
	Po	DATE	ON	OFF	
1	2	27/10	20:02	21:30	SP
2					
3	14	SU	15:00	16:00	SP
4	5	18/10	22:15	23:30	LP
5	--	----	--:--	--:--	
6	--	----	--:--	--:--	
7	--	----	--:--	--:--	
8	--	----	--:--	--:--	

SELECT : CHECK
CANCEL : CANCEL

Note:

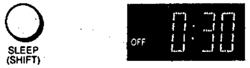
If a timer recording is not performed to the end (due to insufficient tape or cancellation by the user), the programmed timer recording data will be cancelled from the memory by 4 a.m. two days later.
However, if the Timer Record Function is activated at that time, the programmed timer recording data will be cancelled at 4 a.m. the next day.

Other Functions



Automatic VTR Off Time Setting

Press **SLEEP** for the desired time.



- Each press gives a 30 minutes time span up to 9 hours.
- To cancel the setting time, press **SLEEP** repeatedly to set 0:00.

NTSC Playback

Tapes recorded in the NTSC system can be played back with this VTR via a PAL system TV set.

- The playback picture may roll up or down. If the TV set is equipped with a V-HOLD control, it may be possible to stop the picture movement by adjusting this control.
- Depending on the TV set used, the picture may be in black and white. However, this is not an indication of a malfunction.
- NTSC is the TV broadcasting system used in U.S.A., Japan, and some other countries.
  PAL is another TV broadcasting system used in U.K., Germany and many other parts of the world.
  This VTR will not replay or record tapes on the SECAM broadcasting system.
  PAL 525/60 is modified version of the PAL broadcasting system to allow most UK TV's to reproduce a colour picture when an NTSC tape is replayed on this VTR.
  However due to the system change, the picture may shrink, roll or not reproduce colour on some televisions.

Note:
Because the PAL 525/60 is not a true PAL signal, NTSC recordings cannot be dubbed onto another VTR.
In addition, NTSC tapes replayed on this VTR, cannot be dubbed onto another VTR.

Other Automatic Functions

Automatic Playback

When a cassette without an erasure prevention tab is inserted, the VTR starts playback automatically.

VTR-off Playback

When the VTR is off, an inserted cassette can be played back by pressing **PLAY**.

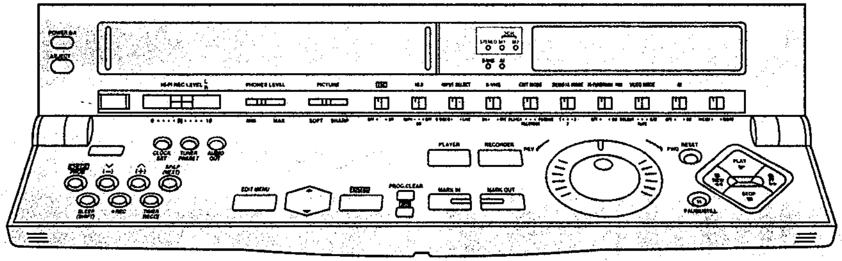
Automatic Rewinding

When the tape reaches its end during recording (except for timer recording) or playback, it will automatically be rewound to the beginning.

Automatic Switching Off and Ejection

When the VTR is switched off, an inserted cassette can be ejected simply by pressing **EJECT**. The VTR will eject the cassette and automatically turn itself off again.

The NICAM Broadcast System For AG-4700B



NICAM is a 2 Channel sound broadcast system to provide either a high quality stereo sound track or 2 independent MONO sound tracks, M1 and M2.

NICAM programmes are always accompanied by standard sound broadcasts and you can select the desired sound with **NICAM/MONO** (when recording) or with **AUDIO OUT** (when playback).

The NICAM digital stereo sound can only be recorded on the Hi-Fi audio track.

When a stereo, dual-soundtrack or mono NICAM programme is being received, the indicators are lit to inform you of the type of broadcast.

Reception of a NICAM Stereo Broadcast

When the STEREO indicator is lit, set **NICAM/MONO** to NICAM to be able to record on the Hi-Fi sound track in stereo.
The Audio cable or the 21 pin scart cable must also be connected to a stereo TV in order to hear the NICAM sound in stereo.

Reception of a NICAM Dual-Sound Broadcast

When the M1 and M2 indicators are lit, set **NICAM/MONO** to NICAM if you want to record both channels on the Hi-Fi sound track. M1 is the left-hand channel and M2 is the right-hand channel.

Reception of a NICAM Monaural Broadcast

When a NICAM monaural broadcast is being received, only the M1 indicator is lit. To hear such a signal on both channels and to record it on both channels of the Hi-Fi track, set **NICAM/MONO** to NICAM.

- To record the regular sound (ordinary normal sound) on the FM audio tracks when a NICAM programme is received, set **NICAM/MONO** to MONO.

Important Note for the NICAM System:
When this VTR tuner is switched on, it will automatically switch to a NICAM broadcast, if NICAM is being transmitted. During test transmissions, it is possible that the sound received doesn't correspond to the picture being viewed. In order to receive a synchronized sound and picture, select monaural sound with either **AUDIO OUT** or with **NICAM/MONO**. This will only apply until NICAM transmissions are fully operational.
At this time the NICAM signal is transmitted on stereo channels only, since the M1 and M2 formats are not yet available. Even if the soundtrack is in MONO the stereo indicator will remain illuminated.

Editing Preparation

This VTR is equipped with programme editing functions. If connected via edit cable to another VTR, it is possible to control such functions as tape playback and editing.

Connections

See the connection diagram on page 9.

Connecting This VTR with Another Identical One

- Connect the two VTRs with an edit cable.
- Connect the recording VTR to the TV.
- Connect the AV1 socket on the playback VTR to the AV2 socket on the recording VTR.
- Select A2 by pressing ∧ ∨ on the recording VTR.
- Set **EDIT MODE** to PASSIVE on the playback VTR, and to RECORDER on the recording VTR.
- Control is performed by the recording VTR.

Using This VTR as the Recording VTR

- Connect this VTR to the playback unit with an edit cable.
- Connect the AV1 socket on this VTR to the TV.
- Connect the AV2 socket or the AUDIO/VIDEO/S-VIDEO IN (AV3) sockets on this VTR to the playback unit.
- Select A2 or A3 by pressing ∧ ∨ on this VTR.

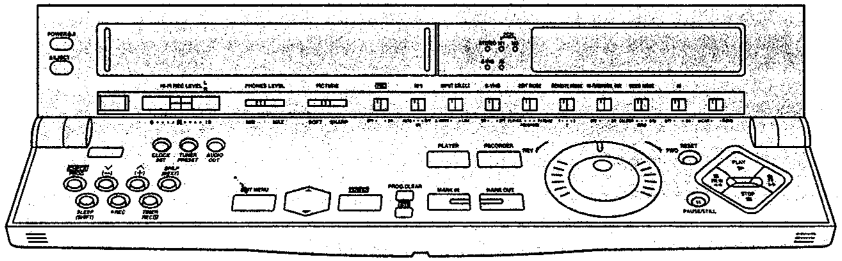
  A2: Through the AV2 socket
  A3: Through the AV3 sockets on front panel
  Set **INPUT SELECT** on this VTR.
  S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
  LINE: Through the VIDEO IN and AUDIO IN sockets
- Set **EDIT MODE** on this VTR to RECORDER.
- Control is performed by this VTR.

Using This VTR as the Playback VTR

- Connect this VTR to the recording unit with an edit cable.
- Connect the AV1 socket on this VTR to the TV.
- Connect the AV2 socket on this VTR to the recording unit.
- Select A2 by pressing ∧ ∨ on this VTR.
- Set the input switch on the recording unit to AV.
- Set **EDIT MODE** on this VTR to PLAYER.
- Control is performed by this VTR.

Caution:
When this VTR is used as the playback VTR, it may not be possible to perform editing operations properly depending on the type of the recording VTR. In such a case, use this VTR as the recording VTR.

Notes:
- During editing operations, use controls on this VTR, not the other unit.
- When a movie camera is connected, operating this VTR will not facilitate reverse playback or reverse slow playback on the movie camera.
- When **EDIT MODE** on this VTR is set to PASSIVE, operation will not be possible after editing function has been performed, and the On Screen Display will not appear. Disconnect the edit cable and set **EDIT MODE** to PLAYER or RECORDER to resume operation.
- When making a connection using an edit cable, disconnection of the AC mains lead on this VTR may result in erroneous display patterns on the other unit.
- When operating the Jog Dial and Shuttle Ring, it is only possible to reset the tape counter of the other unit during still playback.
- The supplied edit cable cannot be used to connect two other VTRs with edit sockets.
- The On Screen Display does not appear when no input signals are supplied from another unit or when a non-recorded cassette is played.
- The On Screen Display may appear distorted if the picture is affected by noise.



Editing Functions

Using this VTR, 4 types of manual editing and 4 types of programme editing can be selected.
In programme editing, after programming up to 10 scenes for each type (50 scenes for Assemble Editing), editing can be performed automatically.

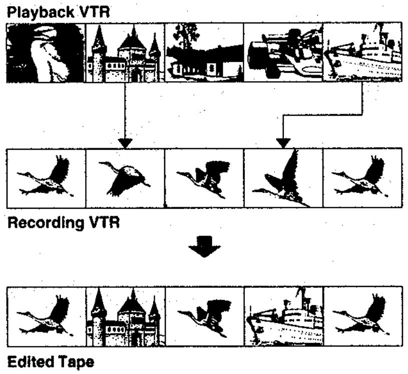
Manual Editing	**Programme Editing**
Copying	Assemble Editing
Insert Editing	Insert Editing
AV Insert Editing	AV Insert Editing
Audio Dubbing	Audio Dubbing

Copying

Allows the re-recording (copying) of the picture and sound from one tape onto another tape.

Insert Editing

Allows the partial replacement of the picture and Hi-Fi sound on a recorded tape. Normal sound is left in its original state.



- To hear the original sound, select the normal sound track by pressing **AUDIO OUT**.
- To hear the new sound and original sound mixed together, set **HI-FI/NORMAL MIX** to ON.

AV Insert Editing

Allows the partial replacement of the picture and both the Hi-Fi and normal sound on a recorded tape.

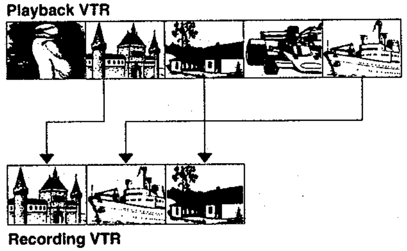
Audio Dubbing

Allows the partial replacement of the normal sound on a recorded tape. Hi-Fi sound is left in its original state.

- To hear the new sound, select the normal sound track by pressing **AUDIO OUT**.
- To hear the new sound and original sound mixed together, set **HI-FI/NORMAL MIX** to ON.

Assemble Editing

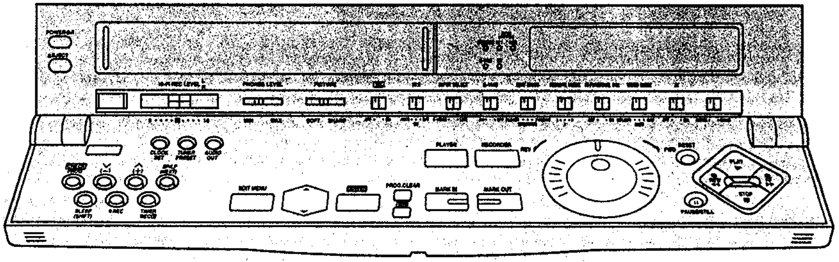
Allows the required scenes (picture and sound) to be picked up from one or more recorded tapes and recorded in any desired order onto another tape.



VITC Editing

The AG-4700 is able to read or write VITC (Vertical Interval Time Code). See page 22.
- VITC enables picture-precise editing.
- The VITC can also be read during pause and slow-motion.
- Editing using the VITC function cannot be performed with movie cameras which have edit sockets (5-pin).
- The editing accuracy when using the VITC function is approximately ±3 frames. This accuracy decreases to approximately ±8 frames when record and pause are repeated.

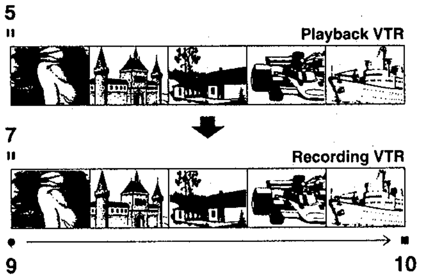
Manual Editing



Copying

Preparation

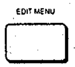
- Make the necessary connections. See page 36.
- Insert a recorded cassette into the playback VTR, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV is on and the VTR viewing channel is selected.

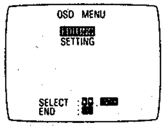

5
II
Playback VTR
7
II
Recording VTR
9
10

Operations **On Screen Display**

Set for Editing

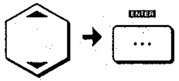
1

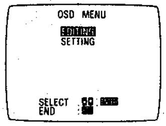



OSD MENU
EDITING
SETTING
SELECT
END

Press **EDIT MENU**.

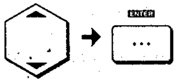
2

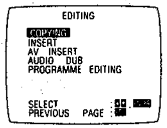



OSD MENU
EDITING
SETTING
SELECT
END

Select **EDITING**.

3




EDITING
COPYING
INSERT
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT
PREVIOUS PAGE

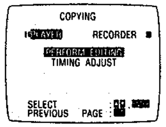
Select **COPYING**.

- If the playback VTR receives no input signals, the On Screen Display may disappear. In such a case, follow the next step and then the On Screen Display will appear.

Playback VTR

4

PLAYER
PAUSE·STILL

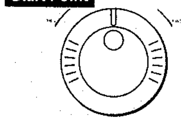

COPYING
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

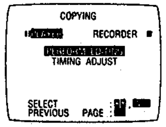
Press **PLAYER** and **PAUSE/STILL**.

- The picture from the playback VTR appears on the screen.

Operations **On Screen Display**

5 **Start Point**

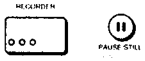


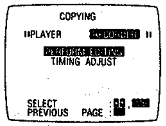

COPYING
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Search for the edit start point on the playback VTR.

Recording VTR

6

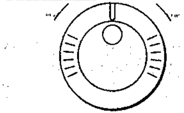

RECORDER
PAUSE·STILL

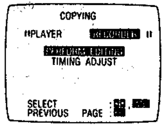

COPYING
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **RECORDER** and **PAUSE/STILL**.

- The picture from the recording VTR appears on the screen.
- Steps **6** and **7** need not be performed when a non-recorded cassette is used.

7 **Start Point**

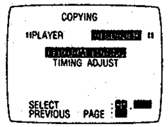



COPYING
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Search for the edit start point on the recording VTR.

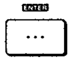
Start Editing

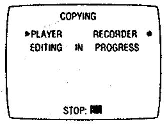
8


COPYING
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Select **PERFORM EDITING**.

9



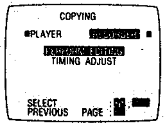

COPYING
PLAYER
RECORDER
EDITING IN PROGRESS
STOP:

Press **ENTER**.

- Editing begins.

Stop Editing

10


COPYING
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **ESC** to stop editing.

11

Press **EDIT MENU**.

- The On Screen Display disappears.

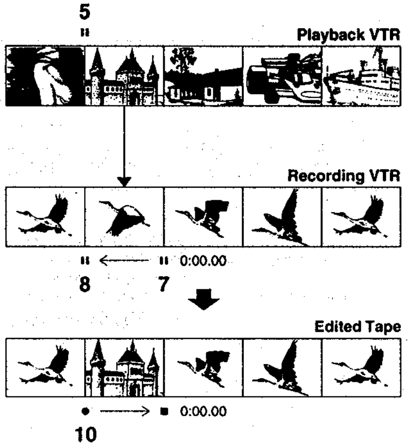
Insert, AV Insert Editing and Audio Dubbing

Preparation

- Make the necessary connections. See page 36.
- Insert a recorded cassette into the playback VTR, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV is on and the VTR viewing channel is selected.

Example: Insert Editing

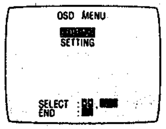
AV Insert Editing and Audio Dubbing are also performed using the same procedure.


5
Playback VTR
Recording VTR
0:00.00
8
7
Edited Tape
0:00.00
10

Operations	**On Screen Display**

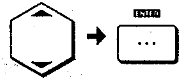
Set for Editing

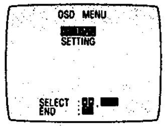
1


OSD MENU
SETTING
SELECT
END

Press **EDIT MENU.**

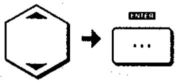
2

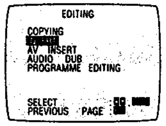



OSD MENU
SETTING
SELECT
END

Select **EDITING.**

3




EDITING
COPYING
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT
PREVIOUS PAGE

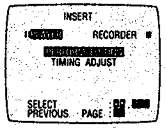
Select **INSERT.**

- If the playback VTR receives no input signals, the On Screen Display may disappear. In such a case, follow the next step and then the On Screen Display will appear.

Playback VTR

4

PLAYER
PAUSE/STILL

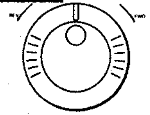

INSERT
RECORDER
TIMING ADJUST
SELECT
PREVIOUS PAGE

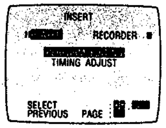
Press **PLAYER** and **PAUSE/STILL.**

- The picture from the playback VTR appears on the screen.

Operations	**On Screen Display**

5 Start Point

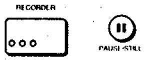


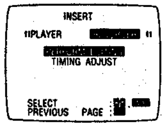

INSERT
RECORDER
TIMING ADJUST
SELECT
PREVIOUS PAGE

Search for the edit start point on the playback VTR.

Recording VTR

6

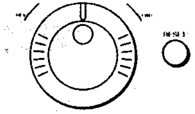

RECORDER
PAUSE/STILL

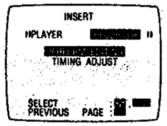

INSERT
PLAYER
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **RECORDER** and **PAUSE/STILL.**

- The picture from the recording VTR appears on the screen.

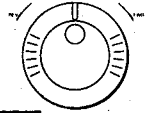
7 End Point

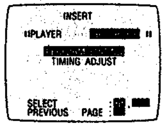

REV
FWD
RESET


INSERT
PLAYER
TIMING ADJUST
SELECT
PREVIOUS PAGE

Search for the edit end point on the recording VTR and press **RESET.**

8 Start Point

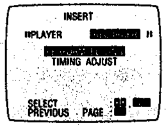



INSERT
PLAYER
TIMING ADJUST
SELECT
PREVIOUS PAGE

Search for the edit start point on the recording VTR.

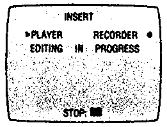
Start Editing

9


INSERT
PLAYER
TIMING ADJUST
SELECT
PREVIOUS PAGE

Select **PERFORM EDITING.**

10


INSERT
PLAYER
RECORDER
EDITING IN PROGRESS
STOP:

Press **ENTER.**

- Editing begins.
- Editing will finish when the counter reaches 0:00.00.

11

Press **EDIT MENU.**

- The On Screen Display disappears.

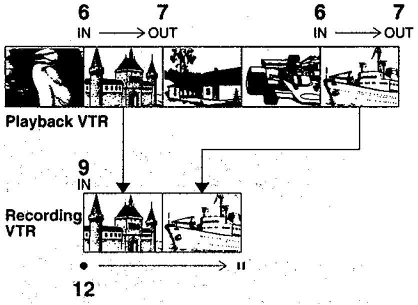
Note:
If the VITC function is activated, **RESET** will be inoperative. In such a case, turn off the VITC function.

Assemble Editing

By setting the edit start point and end point on the playback VTR, along with the edit start point on the recording VTR, assemble editing of up to 10 scenes can be performed automatically.

Preparation

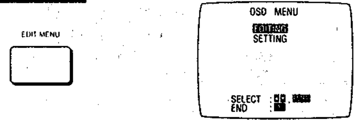
- Make the necessary connections. See page 36.
- Insert a recorded cassette into the playback VTR, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV is on and the VTR viewing channel is selected.


6
7
IN → OUT
6
7
IN → OUT
Playback VTR
9
IN
Recording VTR
12

Operations **On Screen Display**

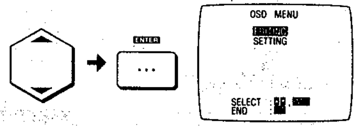
Set for Editing

1


EDIT MENU
OSD MENU
EDITING
SETTING
SELECT
END

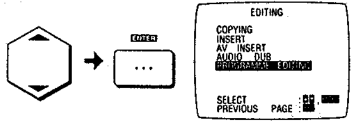
Press **EDIT MENU**.

2


ENTER
OSD MENU
EDITING
SETTING
SELECT
END

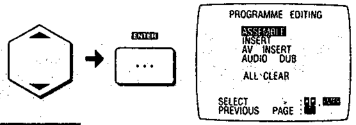
Select **EDITING**.

3


ENTER
EDITING
COPYING
INSERT
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT
PREVIOUS PAGE

Select **PROGRAMME EDITING**.

4

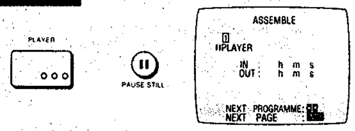

ENTER
PROGRAMME EDITING
ASSEMBLE
INSERT
AV INSERT
AUDIO DUB
ALL CLEAR
SELECT
PREVIOUS PAGE

Select **ASSEMBLE**.

- If the playback VTR receives no input signals, the On Screen Display may disappear. In such a case, follow the next step and then the On Screen Display will appear.

Playback VTR

5


PLAYER
PAUSE/STILL
ASSEMBLE
1
PLAYER
IN : h m s
OUT : h m s
NEXT PROGRAMME
NEXT PAGE

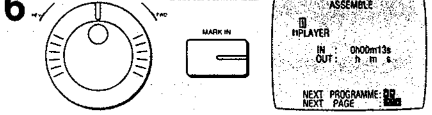
Press **PLAYER** and **PAUSE/STILL**.

- The picture from the playback VTR appears on the screen.

Operations **On Screen Display**

6

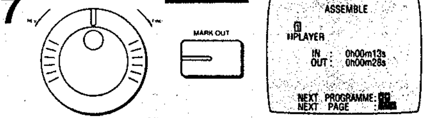
Start Point


MARK IN
ASSEMBLE
1
PLAYER
IN : 0h00m13s
OUT : h m s
NEXT PROGRAMME
NEXT PAGE

Search for the edit start point on the playback VTR and press **MARK IN**.

7

End Point

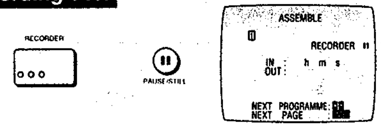

MARK OUT
ASSEMBLE
1
PLAYER
IN : 0h00m13s
OUT : 0h00m28s
NEXT PROGRAMME
NEXT PAGE

Search for the edit end point on the playback VTR and press **MARK OUT**.

- If there is more than one programme, select a programme number using ▼ and ▲, and repeat steps **6** and **7**.

Recording VTR

8

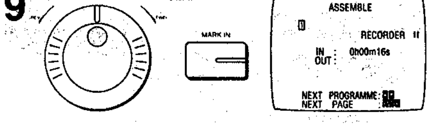

RECORDER
PAUSE/STILL
ASSEMBLE
1
RECORDER
IN : h m s
OUT :
NEXT PROGRAMME
NEXT PAGE

Press **RECORDER** and **PAUSE/STILL**.

- The picture from the recording VTR appears on the screen.

9

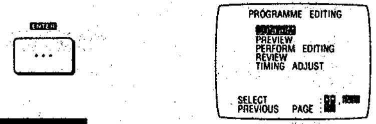
Start Point


MARK IN
ASSEMBLE
1
RECORDER
IN : 0h00m16s
OUT :
NEXT PROGRAMME
NEXT PAGE

Search for the edit start point on the recording VTR and press **MARK IN**.

- Step **9** need not be performed when a non-recorded cassette is used.

10

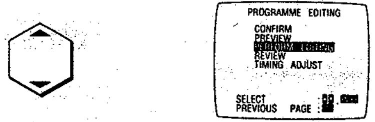

ENTER
PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

Press **ENTER**.

- The edit start point and the edit end point are memorized.

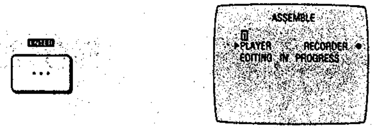
Start Editing

11


PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

Select **PERFORM EDITING**.

12


ENTER
ASSEMBLE
1
▶PLAYER RECORDER ●
EDITING IN PROGRESS

Press **ENTER**.

- Editing begins.
- After editing of all programmes is completed, the both VTRs stop in still playback mode.

Insert, AV Insert Editing and Audio Dubbing

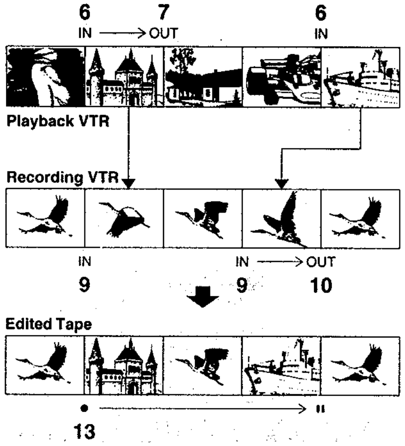
There are 2 types of programme.
To insert only a particular portion:
Set the edit start point and end point on the playback VTR, and the edit start point on the recording VTR.
To insert within fixed limits:
Set the edit start point on the playback VTR, and the edit start and end point on the recording VTR.

- If four points are set, insertion will end when the first end point is reached.

Preparation

- Make the necessary connections. See page 36.
- Insert a recorded cassette into the playback VTR, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV is on and the VTR viewing channel is selected.

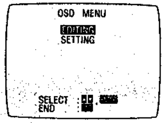
Example: Insert Editing
AV Insert Editing and Audio Dubbing are also performed using the same procedure.



Operations **On Screen Display**

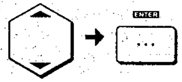
Set for Editing

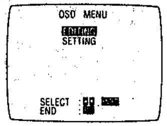
1


OSD MENU
EDITING
SETTING
SELECT :
END :

Press **EDIT MENU**.

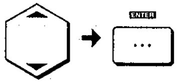
2

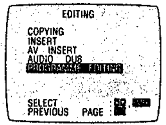



OSD MENU
EDITING
SETTING
SELECT :
END :

Select **EDITING**.

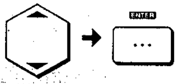
3

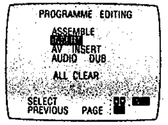



EDITING
COPYING
INSERT
AV INSERT
AUDIO DUB
PROGRAMME EDITING
SELECT :
PREVIOUS PAGE :

Select **PROGRAMME EDITING**.

4




PROGRAMME EDITING
ASSEMBLE
INSERT
AV INSERT
AUDIO DUB
ALL CLEAR
SELECT :
PREVIOUS PAGE :

Select **INSERT**.

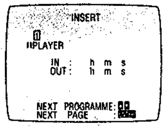
- If the playback VTR receives no input signals, the On Screen Display may disappear.
  In such a case, follow the next step and then the On Screen Display will appear.

Operations **On Screen Display**

Playback VTR

5

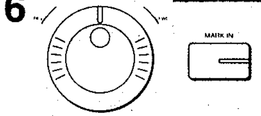
PLAYER
PAUSE STILL

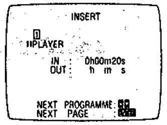

INSERT
1
II PLAYER
IN : h m s
OUT : h m s
NEXT PROGRAMME :
NEXT PAGE :

Press **PLAYER** and **PAUSE/STILL**.

- The picture from the playback VTR appears on the screen.

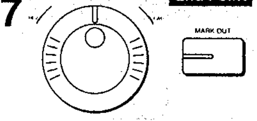
6 **Start Point**

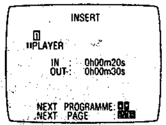



INSERT
1
II PLAYER
IN : 0h00m20s
OUT : h m s
NEXT PROGRAMME :
NEXT PAGE :

Search for the edit start point on the playback VTR and press **MARK IN**.

7 **End Point**



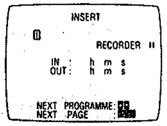

INSERT
1
II PLAYER
IN : 0h00m20s
OUT : 0h00m30s
NEXT PROGRAMME :
NEXT PAGE :

Search for the edit end point on the playback VTR and press **MARK OUT**.

- This step is not necessary if the end point on the recording VTR has been set.

Recording VTR

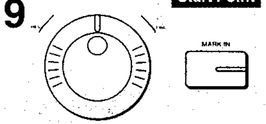
RECORDER
PAUSE STILL

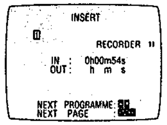

INSERT
1
RECORDER II
IN : h m s
OUT : h m s
NEXT PROGRAMME :
NEXT PAGE :

Press **RECORDER** and **PAUSE/STILL**.

- The picture from the recording VTR appears on the screen.

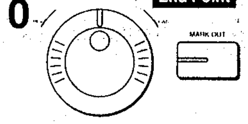
9 **Start Point**

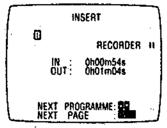



INSERT
1
RECORDER II
IN : 0h00m54s
OUT : h m s
NEXT PROGRAMME :
NEXT PAGE :

Search for the edit start point on the recording VTR and press **MARK IN**.

10 **End Point**

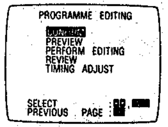



INSERT
1
RECORDER II
IN : 0h00m54s
OUT : 0h01m04s
NEXT PROGRAMME :
NEXT PAGE :

Search for the edit end point on the recording VTR and press **MARK OUT**.

- This step is not necessary if the end point on the playback VTR has been set.
- If there is more than one programme, select a programme number using ▼ and ▲, and repeat steps **5** to **10**.

11


PROGRAMME EDITING
MEMORIZE
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT :
PREVIOUS PAGE :

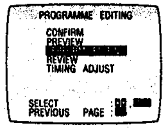
Press **ENTER**.

- The edit start point and the edit end point are memorized.

Operations **On Screen Display**

Start Editing

12

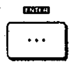


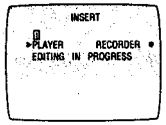
PROGRAMME EDITING
CONFIRM
PREVIEW
[illegible]
REVIEW
TIMING ADJUST
SELECT : [illegible]
PREVIOUS PAGE : [illegible]

Select **PERFORM EDITING.**

- If a programme is not correct, it will appear on the screen. Set the edit start and end points correctly.
- To see a preview before performing editing, select **PREVIEW**. See page 48.

13





INSERT
1
▶PLAYER RECORDER ●
EDITING IN PROGRESS

Press **ENTER.**

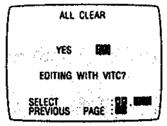
- Editing begins.
- After editing of all programmes is completed, the both VTRs stop in still playback mode.

Notes for Programme Editing:

- For the edit start point, use a location which is at least 10 seconds from the beginning of the tape. Otherwise, the programme will not be executed.
- Programme editing can be suspended in mid-execution by pressing **ESC**. As a result, however, the picture immediately after suspending may disappear.
- Programmes are stored even after editing is completed. Unless they are cancelled, programmes are stored even after the power has been turned off.
- Programme editing can not be performed with a movie camera that has a 4-digit counter. It can be performed with only a movie camera which has a counter display in hours, minutes, seconds format.

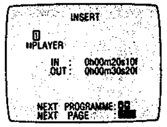
When the VITC function is on:

- If the programme on the normal counter has been stored, the On Screen Display shown below may appear after step **4**.
  If editing is to be performed using the VITC function, select **YES** to cancel all the editing programmes.
  (When the VITC function is off, the On Screen Display shown below will appear if the programme with the time code has been stored.)

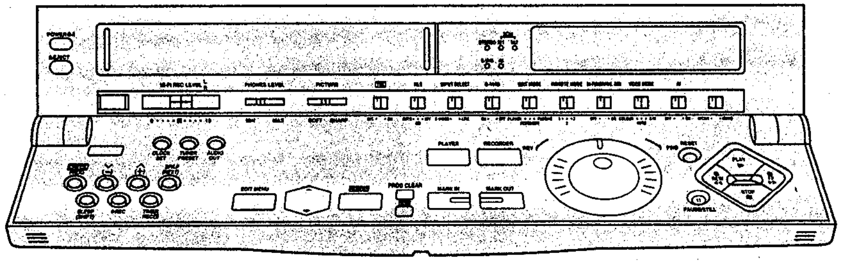


ALL CLEAR
YES [illegible]
EDITING WITH VITC?
SELECT : [illegible]
PREVIOUS PAGE : [illegible]

- When **MARK IN** or **MARK OUT** is pressed, the time code is displayed on the screen in increments of hours, minutes, seconds and frames (25 frames per second).



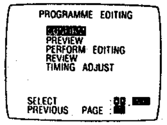
INSERT
1
❚❚PLAYER
IN : 0h00m20s10f
OUT : 0h00m30s20f
NEXT PROGRAMME : [illegible]
NEXT PAGE : [illegible]



Other Editing Functions

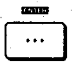
To confirm and Change Editing Programmes

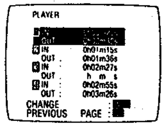
1 Select **CONFIRM** after setting the edit start and end points.



PROGRAMME EDITING
[illegible]
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT : [illegible]
PREVIOUS PAGE : [illegible]

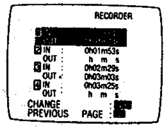
2 Press **ENTER**.
- The programme list for the playback VTR is displayed.





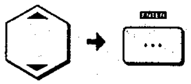
PLAYER
1 IN : [illegible]
OUT : [illegible]
2 IN : 0h01m15s
OUT : 0h01m36s
3 IN : 0h02m27s
OUT : h m s
4 IN : 0h02m55s
OUT : 0h03m26s
CHANGE : [illegible]
PREVIOUS PAGE : [illegible]

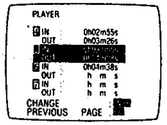
3 Press **RECORDER** to confirm the programmes on the recording VTR.
- Press **PLAYER** to return to the programme list on the playback VTR.



RECORDER
1 IN : [illegible]
OUT : [illegible]
2 IN : 0h01m53s
OUT : h m s
3 IN : 0h02m29s
OUT : 0h03m03s
4 IN : 0h03m25s
OUT : h m s
CHANGE : [illegible]
PREVIOUS PAGE : [illegible]

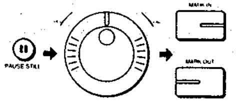
4 Select the programme to be changed.

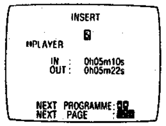




PLAYER
4 IN : 0h02m55s
OUT : 0h03m26s
5 IN : [illegible]
OUT : [illegible]
6 IN : 0h04m38s
OUT : h m s
7 IN : h m s
OUT : h m s
CHANGE : [illegible]
PREVIOUS PAGE : [illegible]

5 Search for the start or end point to be changed and press **MARK IN** or **MARK OUT**.



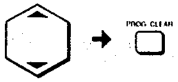


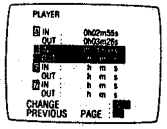
INSERT
5
❚❚PLAYER
IN : 0h05m10s
OUT : 0h05m22s
NEXT PROGRAMME : [illegible]
NEXT PAGE : [illegible]

6 Press **ENTER**.

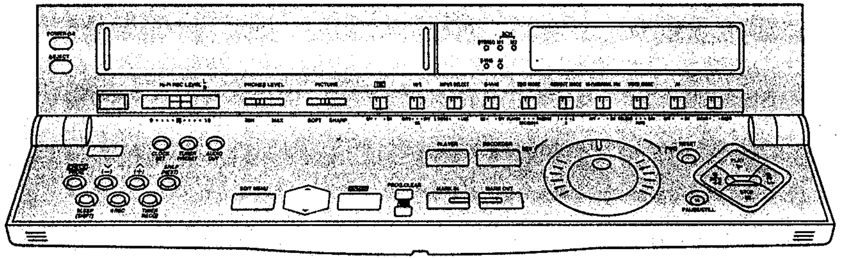
To cancel an Editing Programme

In step **4** above, select the programme to be canceled and press **PROG. CLEAR**.





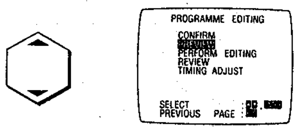
PLAYER
4 IN : 0h02m55s
OUT : 0h03m26s
5 IN : [illegible]
OUT : [illegible]
6 IN : h m s
OUT : h m s
7 IN : h m s
OUT : h m s
CHANGE : [illegible]
PREVIOUS PAGE : [illegible]



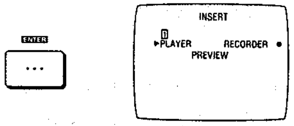
Preview Function

Before performing actual editing, this function allows confirmation of editing operations without recording.

1 Select **PREVIEW** after setting the edit start and end points.


PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

2 Press **ENTER**.
- Preview begins.

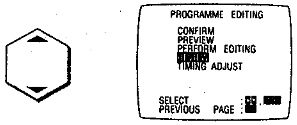

ENTER
INSERT
PLAYER
RECORDER
PREVIEW

Notes:
- Preview function works only when this VTR is used as the recording VTR.
- Preview function does not work during assemble editing.

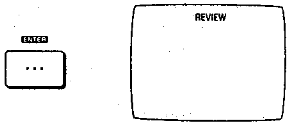
Review Function

After editing has been completed, this function plays back from the edit start point to the edit end point on the recording VTR.

1 Select **REVIEW** after performing editing.


PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

2 Press **ENTER**.
- Review begins.


ENTER
REVIEW

Edit Timing Adjustment

When performing editing in conjunction with a unit which has a different mechanism, there may be a lag in the edit start point due to a deviation between the time a pause cancellation signal is received by the recording unit and the time recording actually begins.
Edit Timing Adjustment is used to compensate the edit start and end time in light of this start-up time deviation.

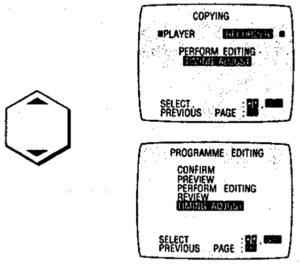
1 Record the second hand on a stopwatch with a movie camera.

2 Insert this recorded cassette into the playback unit, and a cassette with an intact erasure prevention tab into the recording VTR.

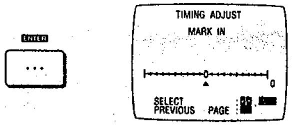
3 Using the point where the second hand reaches zero as the edit start point, perform copying.

4 Play back the copied tape, and check how many seconds had elapsed at the recording start point.
- If timing is correct, recording should begin at exactly zero seconds.

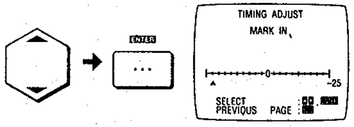
5 Select **TIMING ADJUST** from the screen below.


COPYING
PLAYER
RECORDER
PERFORM EDITING
TIMING ADJUST
SELECT
PREVIOUS PAGE
PROGRAMME EDITING
CONFIRM
PREVIEW
PERFORM EDITING
REVIEW
TIMING ADJUST
SELECT
PREVIOUS PAGE

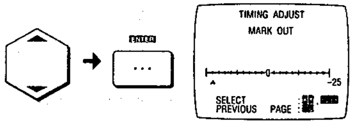
6 Press **ENTER**.


ENTER
TIMING ADJUST
MARK IN
0
0
SELECT
PREVIOUS PAGE

7 Adjust the timing for the start point by setting the amount of the discrepancy of the second hand.
- The setting is displayed in frame (1/25 of a second) units. Thus if, for example, one second had elapsed, set to −25.
- Corrections can be made in the range of ±30 frames (1.2 second).


ENTER
TIMING ADJUST
MARK IN
0
−25
SELECT
PREVIOUS PAGE

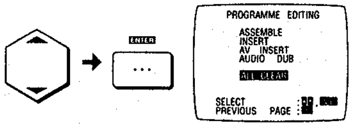
8 Adjust the timing for the end point in the same manner.


ENTER
TIMING ADJUST
MARK OUT
0
−25
SELECT
PREVIOUS PAGE

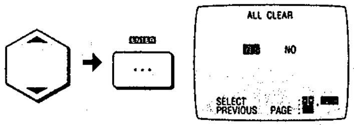
Note:
Edit timing adjustment function only works during programme editing.

To cancel All Editing Programmes

1 Select **ALL CLEAR** from the screen below.


ENTER
PROGRAMME EDITING
ASSEMBLE
INSERT
AV INSERT
AUDIO DUB
ALL CLEAR
SELECT
PREVIOUS PAGE

2 Select **YES**.
- All programmes will be cancelled.


ENTER
ALL CLEAR
YES
NO
SELECT
PREVIOUS PAGE

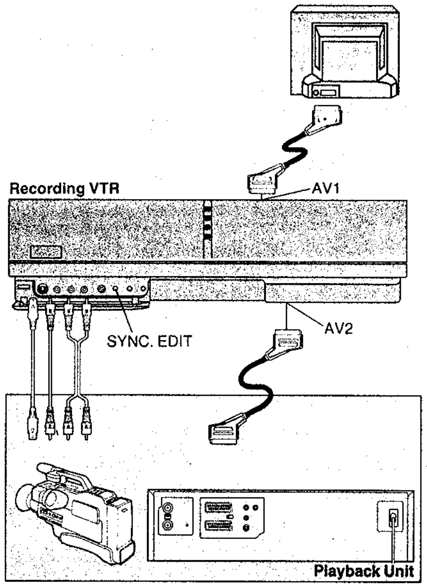
Editing when not Using an Edit Cable

To connect a VTR or Movie Camera without an Edit Socket and use This VTR as the Recording VTR

- Connect the AV1 socket on this VTR to the TV.
- Connect the AV2 socket or the AUDIO/VIDEO/S-VIDEO IN (AV3) sockets on this VTR to the playback unit.
- Select A2 or A3 by pressing ∧ ∨ on this VTR.
  A2: Through the AV2 socket
  A3: Through the AV3 sockets on front panel
  Set **INPUT SELECT** on this VTR.
  S-VIDEO: Through the S-VIDEO IN and AUDIO IN sockets
  LINE: Through the VIDEO IN and AUDIO IN sockets
- Set **EDIT MODE** on this VTR to RECORDER.
- Control is performed by the respective units.

Preparation

- Make the necessary connections.
- Insert a recorded cassette into the playback unit, and a cassette with an intact erasure prevention tab into the recording VTR.
- Confirm that the TV is on and the VTR viewing channel is selected.


Recording VTR
AV1
SYNC. EDIT
AV2
Playback Unit

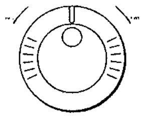
Assembly Editing

Operations

1 Press **PAUSE/STILL** on the recording VTR.

PAUSE/STILL

2 Search for the end of the previous recording.



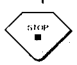
3 Press **REC** to set for the new recording.

4 Start playback on the playback unit.

5 Press **PAUSE/STILL** again to start the new recording.

PAUSE/STILL

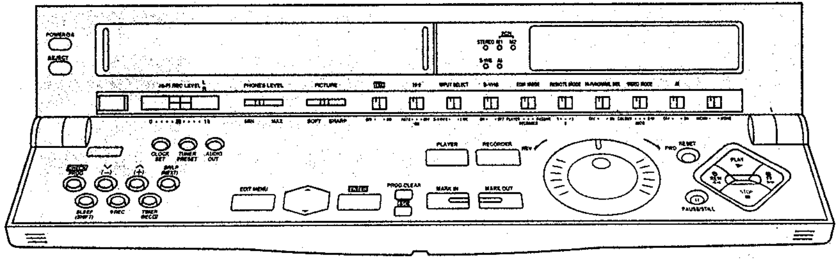
6 Press **STOP** to stop recording.



Synchronized Editing

By connecting a VTR or movie camera with synchronized editing capability to this VTR using a synchro connection cord (optional), it is possible to synchronize the playback start and stop of the playback unit with the recording start and stop of this VTR.

1. Put the recording VTR into the recording pause mode by pressing **REC** and **PAUSE/STILL**.
2. Put the playback unit into the still playback mode at the point where editing is to begin.
3. Press **PAUSE/STILL** on the recording VTR.
   - The playback unit switches over to the playback mode, and copying begins automatically.



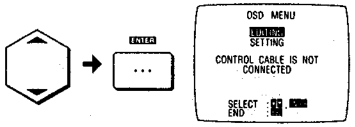
Insert Editing, AV Insert Editing and Audio Dubbing

Operations **On Screen Display**

1

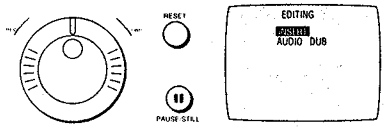
Press **EDIT MENU**.

2


ENTER
OSD MENU
EDITING
SETTING
CONTROL CABLE IS NOT CONNECTED
SELECT
END

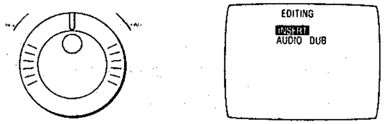
Select **EDITING**.

3


RESET
PAUSE/STILL
EDITING
INSERT
AUDIO DUB

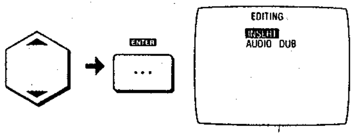
Press **PAUSE/STILL** and search for the edit end point, and press **RESET**.
- It is not required for audio dubbing to search for the edit end point and reset.

4


EDITING
INSERT
AUDIO DUB

Search for the edit start point.

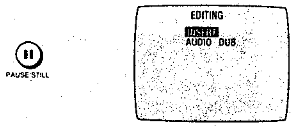
5


ENTER
EDITING
INSERT
AUDIO DUB

Select **INSERT** or **AUDIO DUB**.
- AV insert editing is selected if both **AUDIO DUB** and **INSERT** are selected.
- If once selected, Insert or Audio Dubbing mode is still active even if the On Screen Display disappears by pressing **EDIT MENU**.

6 Start playback on the playback unit.

7


PAUSE/STILL
EDITING
INSERT
AUDIO DUB

Press **PAUSE/STILL**.
- Editing begins.
- Insert and AV insert editing will finish when the counter reaches 0:00.00.
- Press **STOP** to stop audio dubbing.

SECTION 2
ADJUSTMENT PROCEDURES

2-1. DISASSEMBLY METHOD

2-1-1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.
When reassembling, perform the steps in the reverse order.

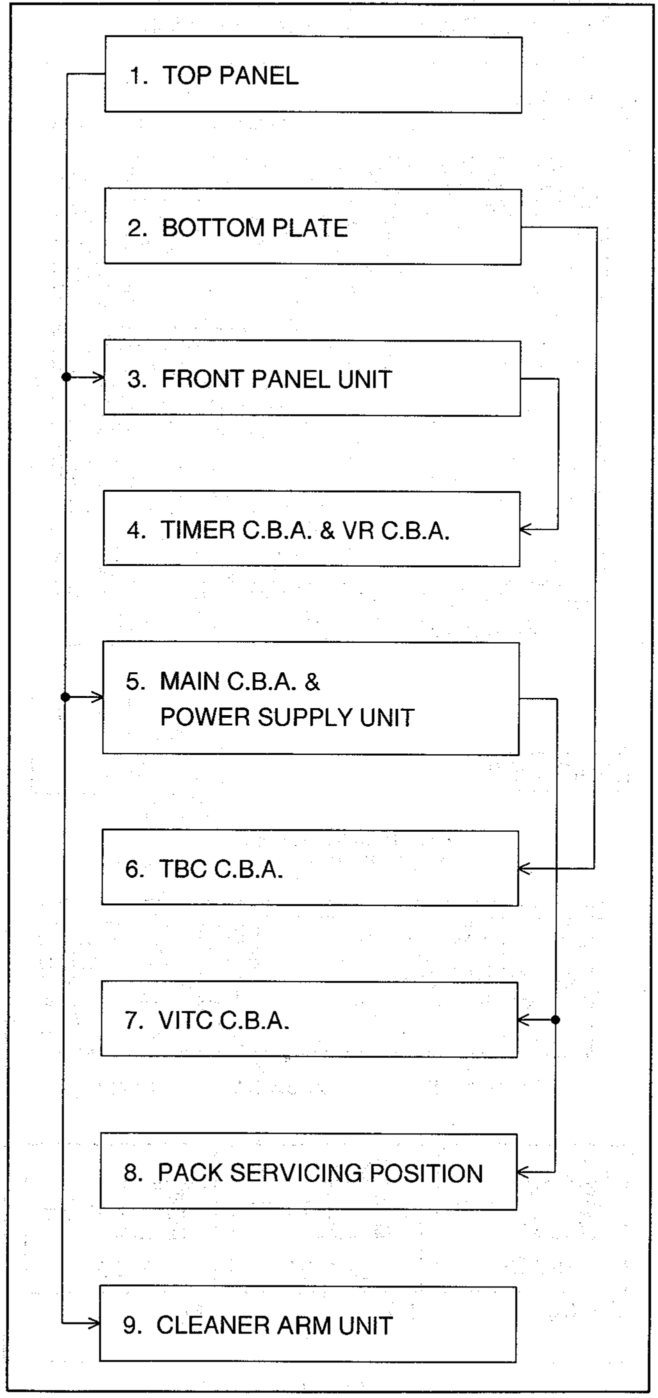

1. TOP PANEL
2. BOTTOM PLATE
3. FRONT PANEL UNIT
4. TIMER C.B.A. & VR C.B.A.
5. MAIN C.B.A. & POWER SUPPLY UNIT
6. TBC C.B.A.
7. VITC C.B.A.
8. PACK SERVICING POSITION
9. CLEANER ARM UNIT

Fig. D1

2-1-2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove...... 4 Screws (A)

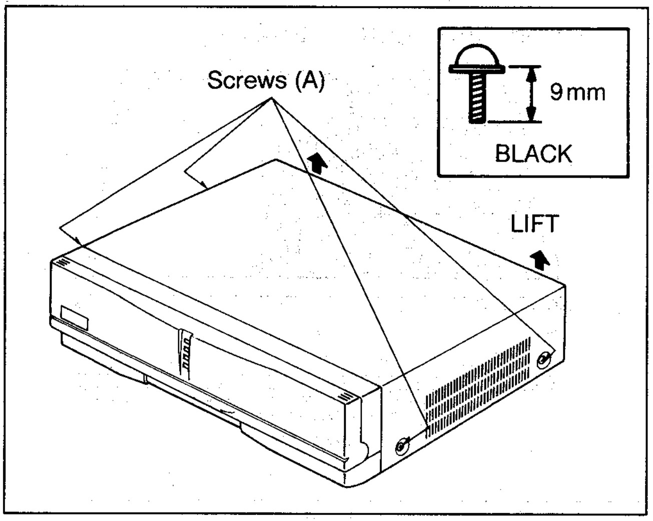

Screws (A)
9mm
BLACK
LIFT

Fig. D2

2. REMOVAL OF THE BOTTOM PLATE

Remove...... 6 Screws (B)

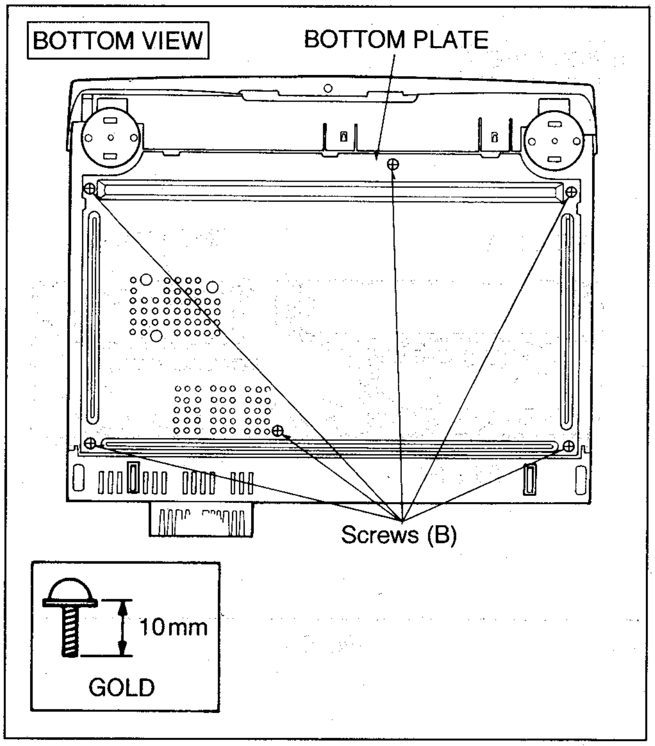

BOTTOM VIEW
BOTTOM PLATE
Screws (B)
10mm
GOLD

Fig. D3

3. REMOVAL OF THE FRONT PANEL UNIT

Remove...... Screws (C)
Unlock .... 8 Tabs (D)

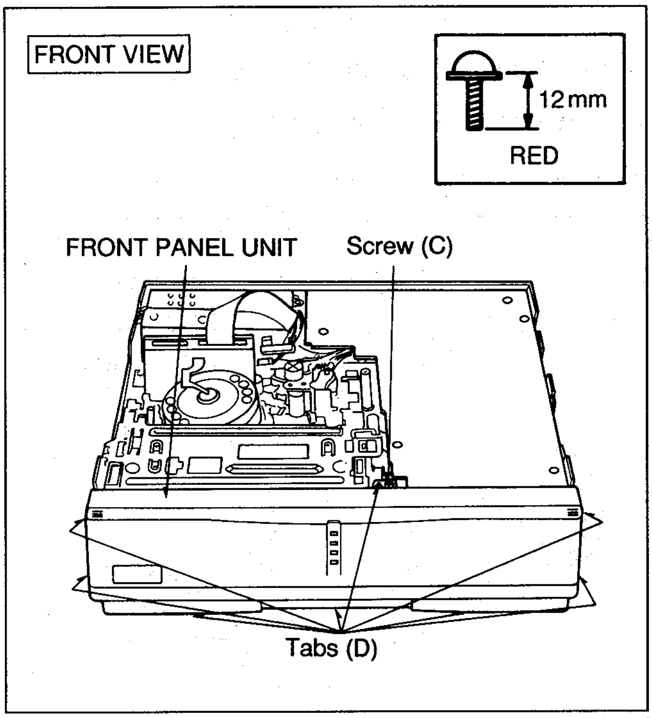

FRONT VIEW
12mm
RED
FRONT PANEL UNIT
Screw (C)
Tabs (D)

Fig. D4

4. REMOVAL OF THE TIMER C.B.A. & THE VR C.B.A.

Unlock .... 9 Tabs (F)

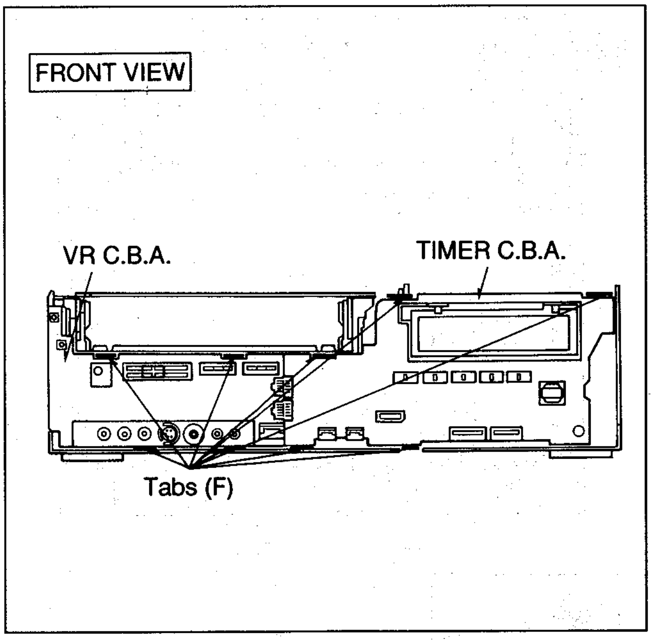

FRONT VIEW
VR C.B.A.
TIMER C.B.A.
Tabs (F)

Fig. D5

5. REMOVAL OF THE MAIN C.B.A. & THE POWER SUPPLY UNIT

REMOVAL OF THE MAIN C.B.A.

Remove...... 3 Screws (G)
Remove...... 2 Screws (H)
Unlock .... Tab (I)

REMOVAL OF THE POWER SUPPLY UNIT

Remove...... 2 Screws (J)
Remove...... Screws (K)
Unlock .... 2 Screws (L) and The HEAT SINK COVER
Remove...... Screw (M) and The HEAT SINK

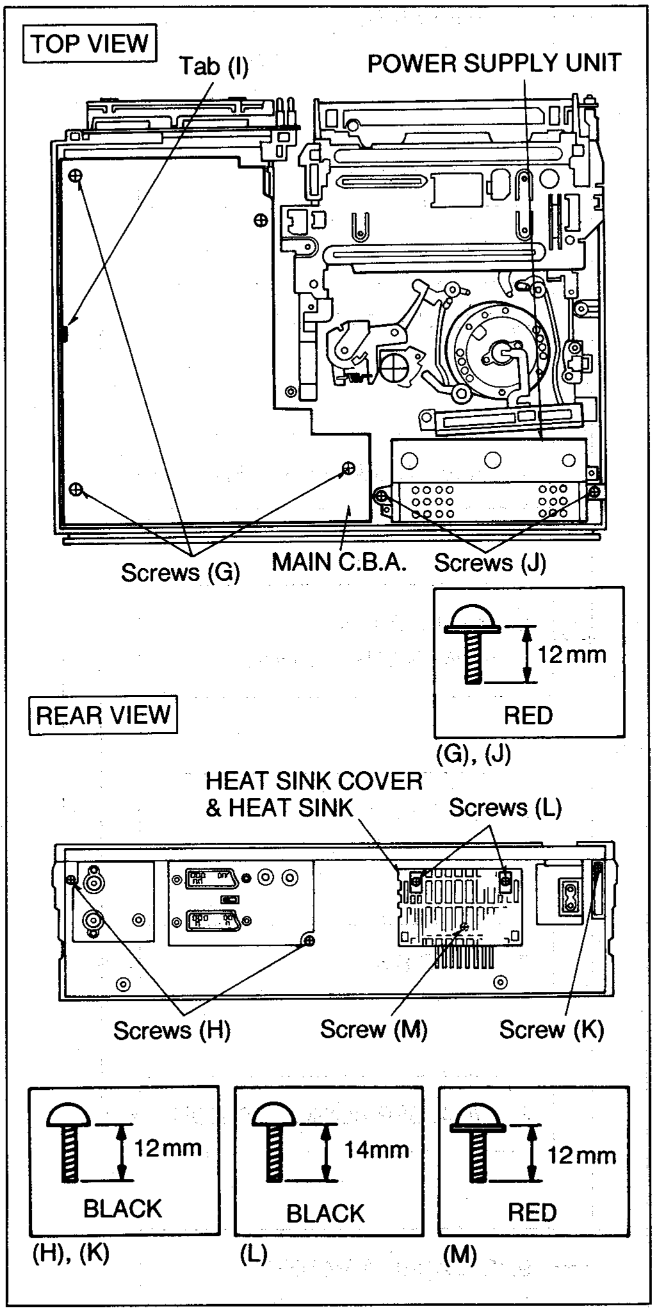

TOP VIEW
Tab (I)
POWER SUPPLY UNIT
Screws (G)
MAIN C.B.A.
Screws (J)
12mm
RED
(G), (J)
REAR VIEW
HEAT SINK COVER
& HEAT SINK
Screws (L)
Screws (H)
Screw (M)
Screw (K)
12mm
BLACK
(H), (K)
14mm
BLACK
(L)
12mm
RED
(M)

Fig. D6

6. REMOVAL OF THE TBC C.B.A.

Remove...... 4 Screws (N)

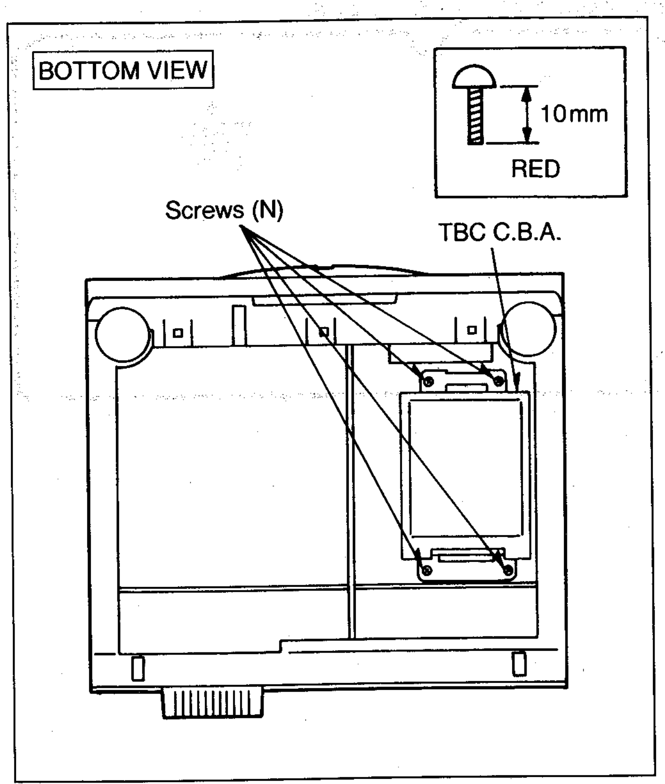


Fig. D7

7. REMOVAL OF THE VITC C.B.A.

Unlock .... VITC HOLDER (O)

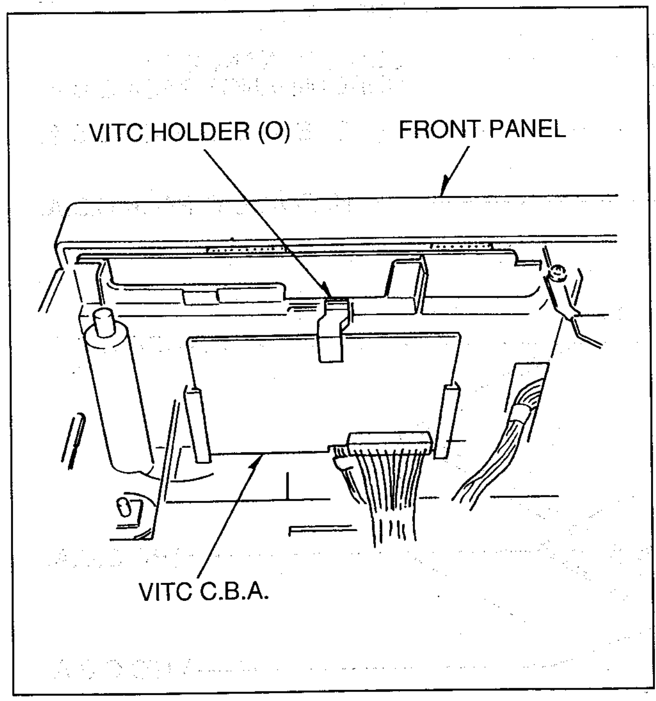


Fig. D8

8. PACK SERVICING POSITION

CAUTION:
Confirm the isolation between Mechanical Chassis and Main C.B.A. before connecting Main AC.

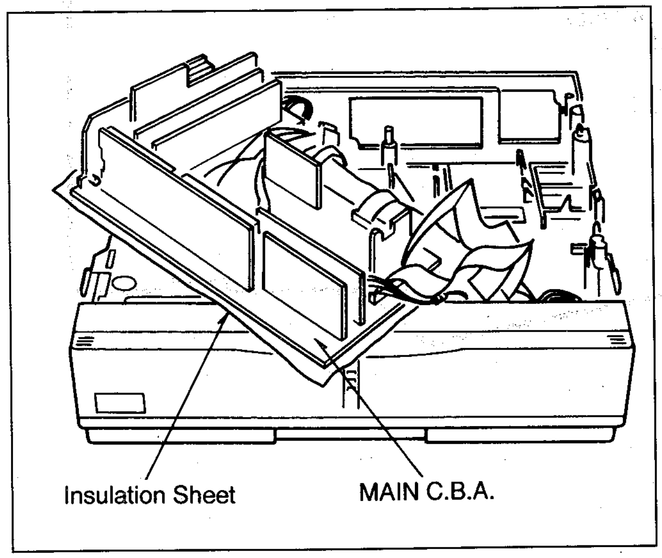


Fig. D9

9. REMOVAL OF THE CLEANER ARM UNIT

1. Unlock the locking portion (P).
2. Pull up the Cleaner Arm Unit.

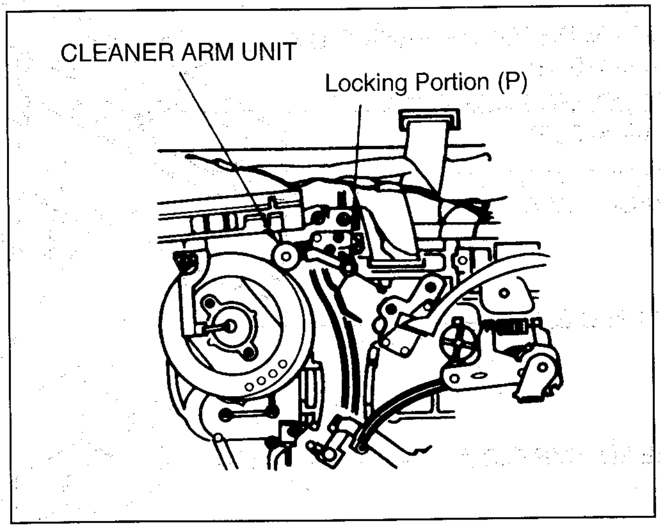


Fig. D10

2-2. MECHANICAL ADJUSTMENT PROCEDURES

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VSD9402M632)

CAUTIONS:

To make a Adjustment Mode for Tape interchangeability, connect a Jumper wire which has been cut as shown in Fig. M1.
(Auto Tracking is turned off)
After finishing the adjustment, disconnect the jumper wire.

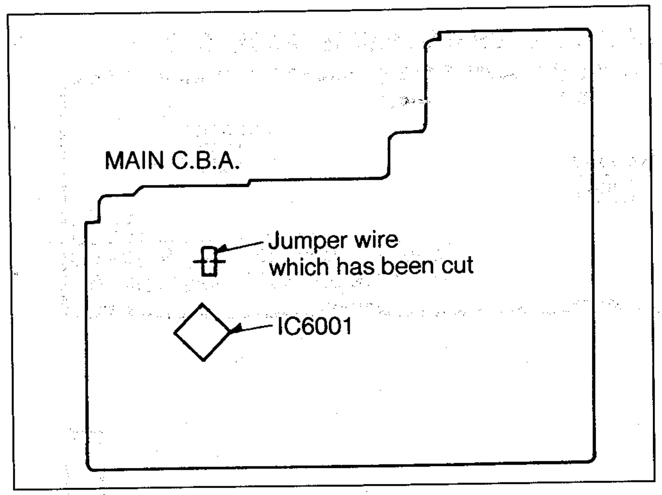


Fig. M1

2-3. DISASSEMBLY PROCEDURES OF MECHANISM

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VSD9402M632)

2-4. ASSEMBLY PROCEDURES OF MECHANISM

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VSD9402M632)

2-5. MAINTENANCE

2-5-1. REGULAR MAINTENANCE

The purpose of periodic maintenance is to preserve the functioning of this machine throughout its useful life. The user or service dealer should perform these maintenance regularly to ensure that maximum utility is obtained from the machine.

The VCR is a complicated place of equipment. It contains many belts, rollers, heads etc., which become worn, and deterlorate as time goes by, causing trouble. Dust and dirt will also impede the proper functioning of the machine. In light of this, it is very important that overall maintenance be done according to the maintenance chart to maintain the functions of the VCR, and to avoid accidental problems. This maintenance should also be performed after any repairs are done on the equipment.

The VCR used for business applications requires particular attention for several reasons. The installation conditions and applications are not always the best. Long use times, or poor environmental conditions may adversely affect the lifespan and performance of the machine. Regular maintenance assures that the purchaser obtains the maximum value for his expenditure. Accordingly, the necessity of regular maintenance should be fully explained at the time of sale, as well as during after-sale repairs.

2-5-2. M

The follo
the life o

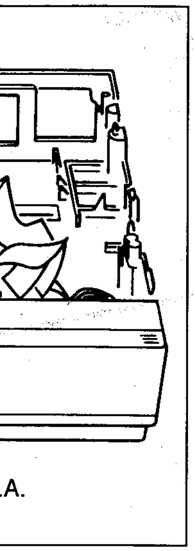
Ref. No. IN P/L

20(1)
70(1)
71(1)
60(1)
61(1)
105(2)
106(2)
49(1)
15(1)
52(1)
113(2)

✻ NOTE

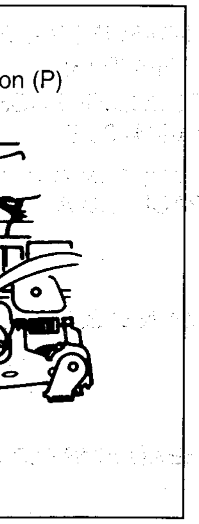
Symbol
●
◎
△
▲
×

ical Chassis and
C.



.A.

NIT



on (P)

2-2. MECHANICAL ADJUSTMENT PROCEDURES

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VSD9402M632)

CAUTIONS:

To make a Adjustment Mode for Tape interchangeability, connect a Jumper wire which has been cut as shown in Fig. M1.
(Auto Tracking is turned off)
After finishing the adjustment, disconnect the jumper wire.

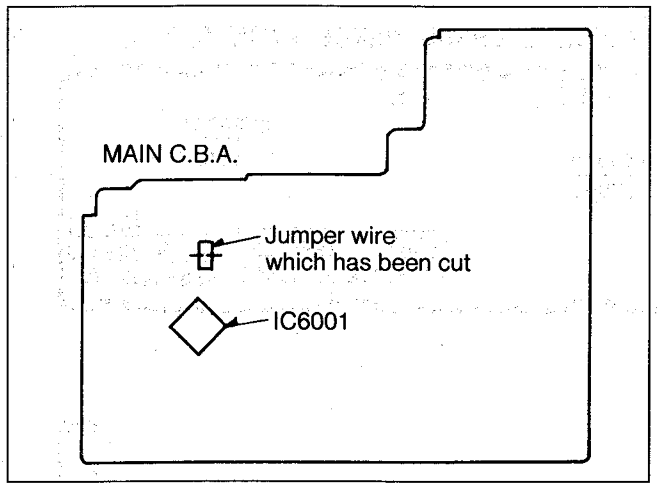


Fig. M1

2-3. DISASSEMBLY PROCEDURES OF MECHANISM

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VSD9402M632)

2-4. ASSEMBLY PROCEDURES OF MECHANISM

The mechanical chassis of this model is the K Mechanical Chassis.
Therefore refer to the Service Manual for K Mechanical Chassis. (Order No. VSD9402M632)

2-5. MAINTENANCE

2-5-1. REGULAR MAINTENANCE

The purpose of periodic maintenance is to preserve the functioning of this machine throughout its useful life. The user or service dealer should perform these maintenance regularly to ensure that maximum utility is obtained from the machine.

The VCR is a complicated place of equipment. It contains many belts, rollers, heads etc., which become worn, and deterlorate as time goes by, causing trouble. Dust and dirt will also impede the proper functioning of the machine. In light of this, it is very important that overall maintenance be done according to the maintenance chart to maintain the functions of the VCR, and to avoid accidental problems. This maintenance should also be performed after any repairs are done on the equipment.

The VCR used for business applications requires particular attention for several reasons. The installation conditions and applications are not always the best. Long use times, or poor environmental conditions may adversely affect the lifespan and performance of the machine. Regular maintenance assures that the purchaser obtains the maximum value for his expenditure. Accordingly, the necessity of regular maintenance should be fully explained at the time of sale, as well as during after-sale repairs.

2-5-2. MAINTENANCE CHART

The following periodic maintenance is required to prolong the life of the machine.

Ref. No. IN P/L	Parts Name	Hour									
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000
———	Tape Transporter	●	●	●	●	●	●	●	●	●	●
20(1)	A/C Head U	●	●	●	●	●	●	●	◎	●	●
70(1)	Cylinder U	●	●	●	●	●	●	●	◎	●	●
71(1)	Upper Cylinder	●	◎	●	◎	●	◎	●	◎	●	◎
60(1)	Supply Reel Table U	●	●	●	●△	●	●	●	●△	●	●△
61(1)	Take-up Reel Tuble U	●	●	●	●△	●	●	●	●△	●	●△
105(2)	Capstan Housing U								◎		
106(2)	Capstan Rotor U	●	●△	●	●△	●	●△	●	◎△	●	●△
49(1)	Pinch Arm U				◎				◎		
15(1)	Impedance Roller U	●	●	●	●	●	●	●	◎	●	●
52(1)	Tension Band U				◎				◎		
113(2)	Timing Belt				◎				◎		

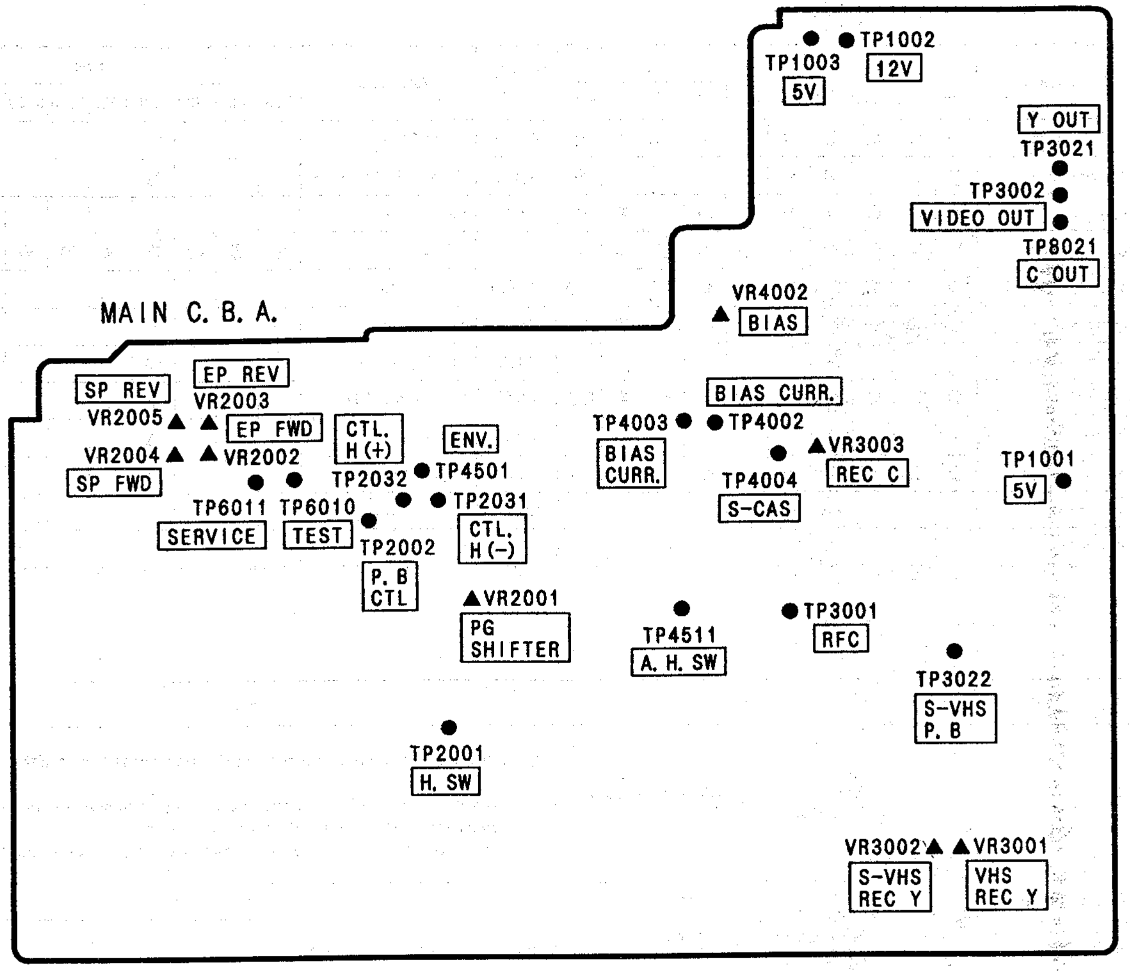
Ref. No. IN P/L	Parts Name	Hour									
		500	1000	1500	2000	2500	3000	3500	4000	4500	5000
63(1)	Supply Brake Arm U				◎				◎		
64(1)	Take-up Brake Arm U				◎				◎		
62(1)	Earth Plate								◎		
12(1)	FE Head	●	●	●	●	●	●	●	◎	●	●
127(2)	Mode Switch								◎		
108(2)	Main Cam Gear				×				×		
121(2)	Loading Motor U				◎				◎		
40(1)	Inclined Base (S) U				▲				▲		◎
41(1)	Inclined Base (T) U				▲				▲		◎
9(1)	Cleaner Arm U				◎				◎		
128(2)	SS Brake Base U				◎				◎		

✻ NOTE:

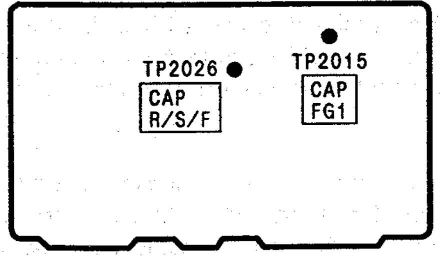
Symbol	Maintenance	Requirement	Remark
●	Cleaning	Ethyl-alcohol or Cleaning Liquid (Purchase locally)	Wipe dirt from the parts using soft cloth impregnated with Ethyl-Alcohol. Note: When cleaning rubber parts, avoid using excessive alcohol since it may accelerate deterioration of these parts. After cleaning with alcohol, wipe the alcohol quickly and thoroughly.
◎	Replacement	————	————
△	Lubrication	High Quality Spindle Oil (Purchase locally)	Supply one or two drops of oil.
▲	Greasing	Molytone Grease (MOR265)	Wipe the old grease and apply new grease.
×	Greasing	S.C.R. Grease (VFK0680)	Wipe the old grease and apply new grease.

LOCATION OF TEST POINTS & CONTROLS

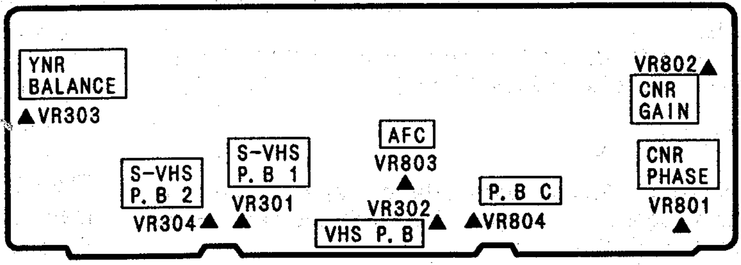
MAIN C. B. A.


TP1003
TP1002
5V
12V
Y OUT
TP3021
TP3002
VIDEO OUT
TP8021
C OUT
VR4002
BIAS
SP REV
EP REV
VR2003
VR2005
EP FWD
VR2004
VR2002
SP FWD
CTL. H(+)
ENV.
TP2032
TP4501
TP6011
TP6010
TP2031
SERVICE
TEST
TP2002
CTL. H(−)
P. B CTL
BIAS CURR.
TP4003
TP4002
VR3003
BIAS CURR.
REC C
TP4004
S-CAS
TP1001
5V
VR2001
PG SHIFTER
TP4511
A. H. SW
TP3001
RFC
TP3022
S-VHS P. B
TP2001
H. SW
VR3002
VR3001
S-VHS REC Y
VHS REC Y

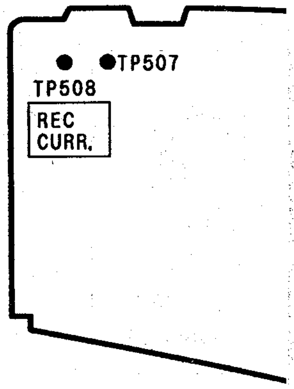
CAPSTAN DRIVE PACK C. B. A.


TP2026
CAP R/S/F
TP2015
CAP FG1

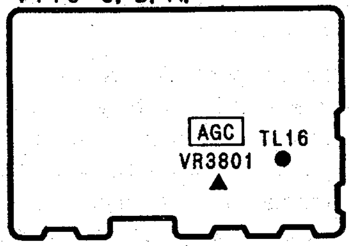
LUMINANCE & CHROMINANCE PACK C. B. A.


YNR BALANCE
VR303
S-VHS P. B 2
VR304
S-VHS P. B 1
VR301
AFC
VR803
VR302
VHS P. B
P. B C
VR804
VR802
CNR GAIN
CNR PHASE
VR801

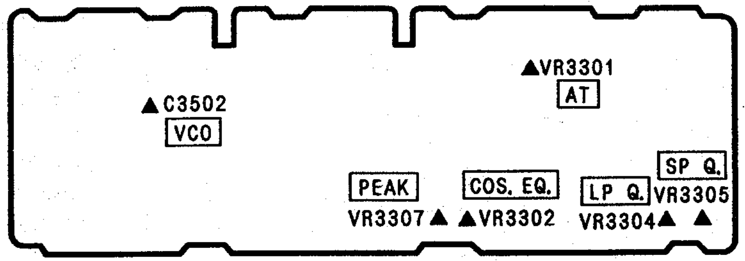
HEAD AMP C. B. A.


TP508
TP507
REC CURR.

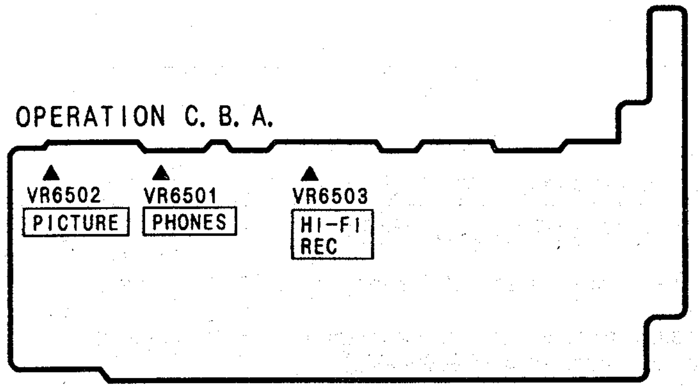
VITC C. B. A.


AGC
VR3801
TL16

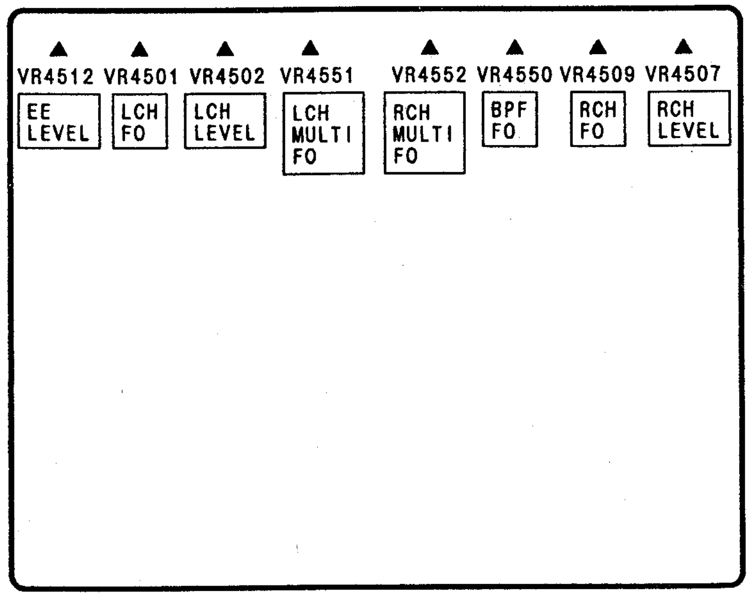
SUB LUMINANCE & CHROMINANCE PACK C. B. A.


C3502
VCO
VR3301
AT
PEAK
VR3307
COS. EQ.
VR3302
LP Q.
VR3304
SP Q.
VR3305

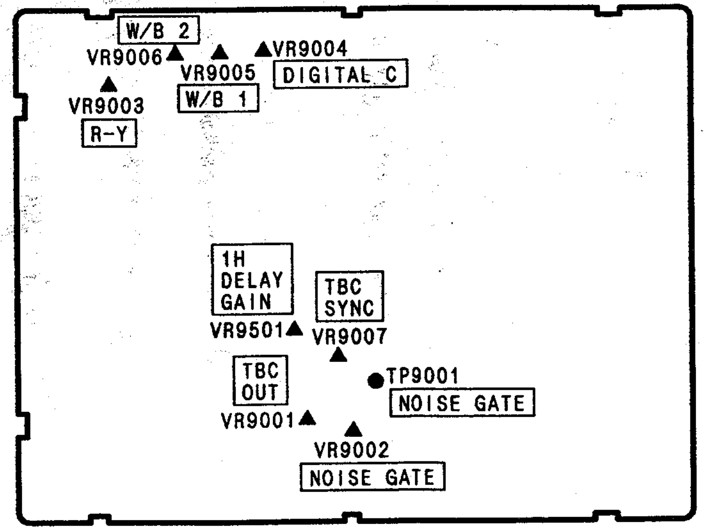
OPERATION C. B. A.


VR6502
PICTURE
VR6501
PHONES
VR6503
HI-FI REC

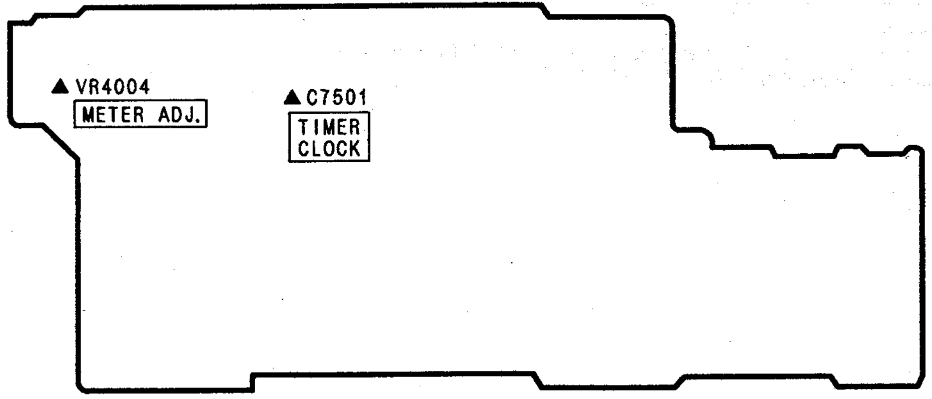
Hi-Fi AUDIO PACK C. B. A.


VR4512
EE LEVEL
VR4501
LCH FO
VR4502
LCH LEVEL
VR4551
LCH MULTI FO
VR4552
RCH MULTI FO
VR4550
BPF FO
VR4509
RCH FO
VR4507
RCH LEVEL

TBC C. B. A.


W/B 2
VR9006
VR9004
VR9005
DIGITAL C
W/B 1
VR9003
R-Y
1H DELAY GAIN
VR9501
TBC SYNC
VR9007
TBC OUT
VR9001
TP9001
NOISE GATE
VR9002
NOISE GATE

TIMER C. B. A.


VR4004
METER ADJ.
C7501
TIMER CLOCK

CIRCUIT BC

REC/RF AMP PA(

NICAM DECODEI
(AG-4700B)

DECODER PACK
(AG-4700E)

CAPSTAN DRIVE
PACK C.B.A.

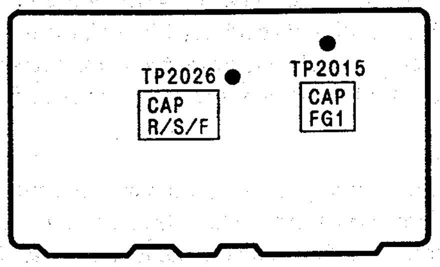
MAIN C.B.A.

HEAD AMP C.B.A

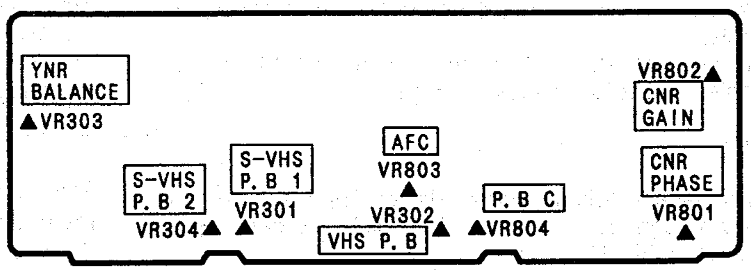
VR C.B.A.

TIMER C.B.A.

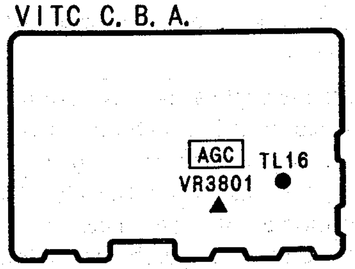
CAPSTAN DRIVE PACK C. B. A.


TP2026
CAP R/S/F
TP2015
CAP FG1

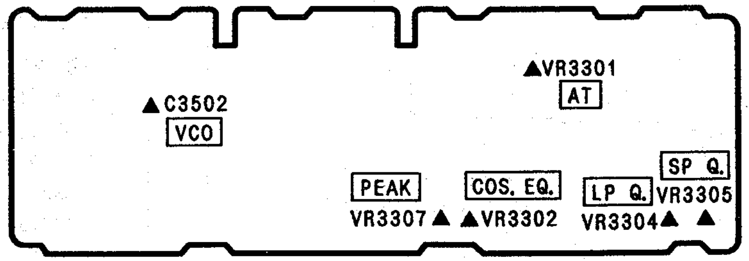
LUMINANCE & CHROMINANCE PACK C. B. A.


YNR BALANCE
VR303
S-VHS P. B 2
VR304
S-VHS P. B 1
VR301
AFC
VR803
VR302
VHS P. B
P. B C
VR804
VR802
CNR GAIN
CNR PHASE
VR801

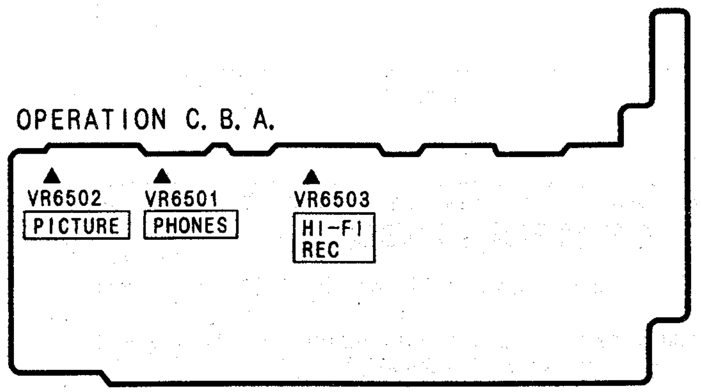
VITC C. B. A.

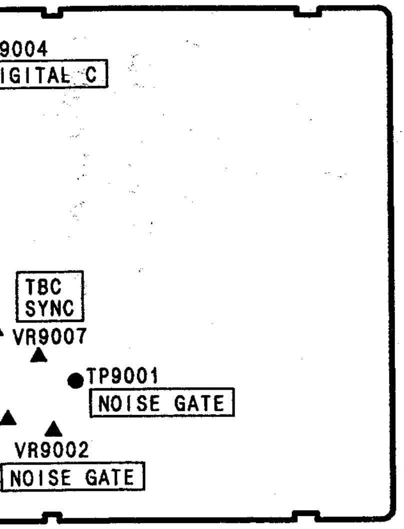

AGC
VR3801
TL16

SUB LUMINANCE & CHROMINANCE PACK C. B. A.

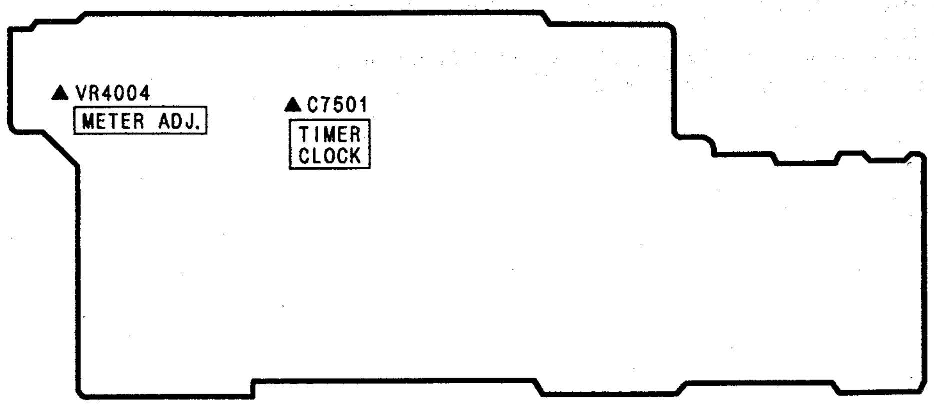

C3502
VCO
VR3301
AT
PEAK
VR3307
COS. EQ.
VR3302
LP Q.
VR3304
SP Q.
VR3305

OPERATION C. B. A.

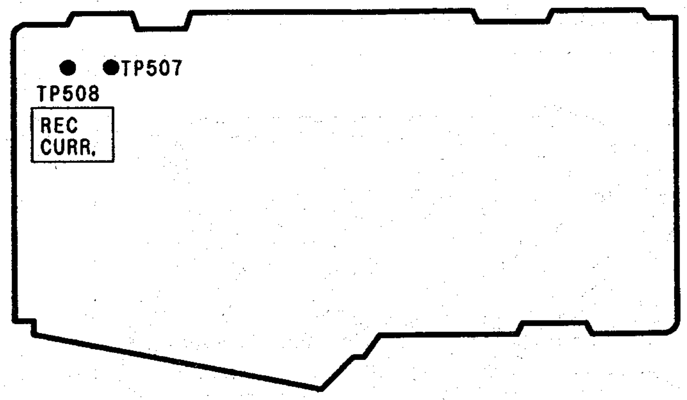

VR6502
PICTURE
VR6501
PHONES
VR6503
HI-FI REC


9004
IGITAL C
TBC SYNC
VR9007
TP9001
NOISE GATE
VR9002
NOISE GATE

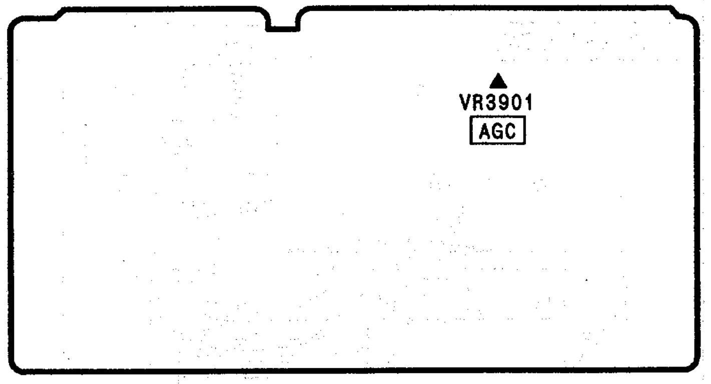
TIMER C. B. A.


VR4004
METER ADJ.
C7501
TIMER CLOCK

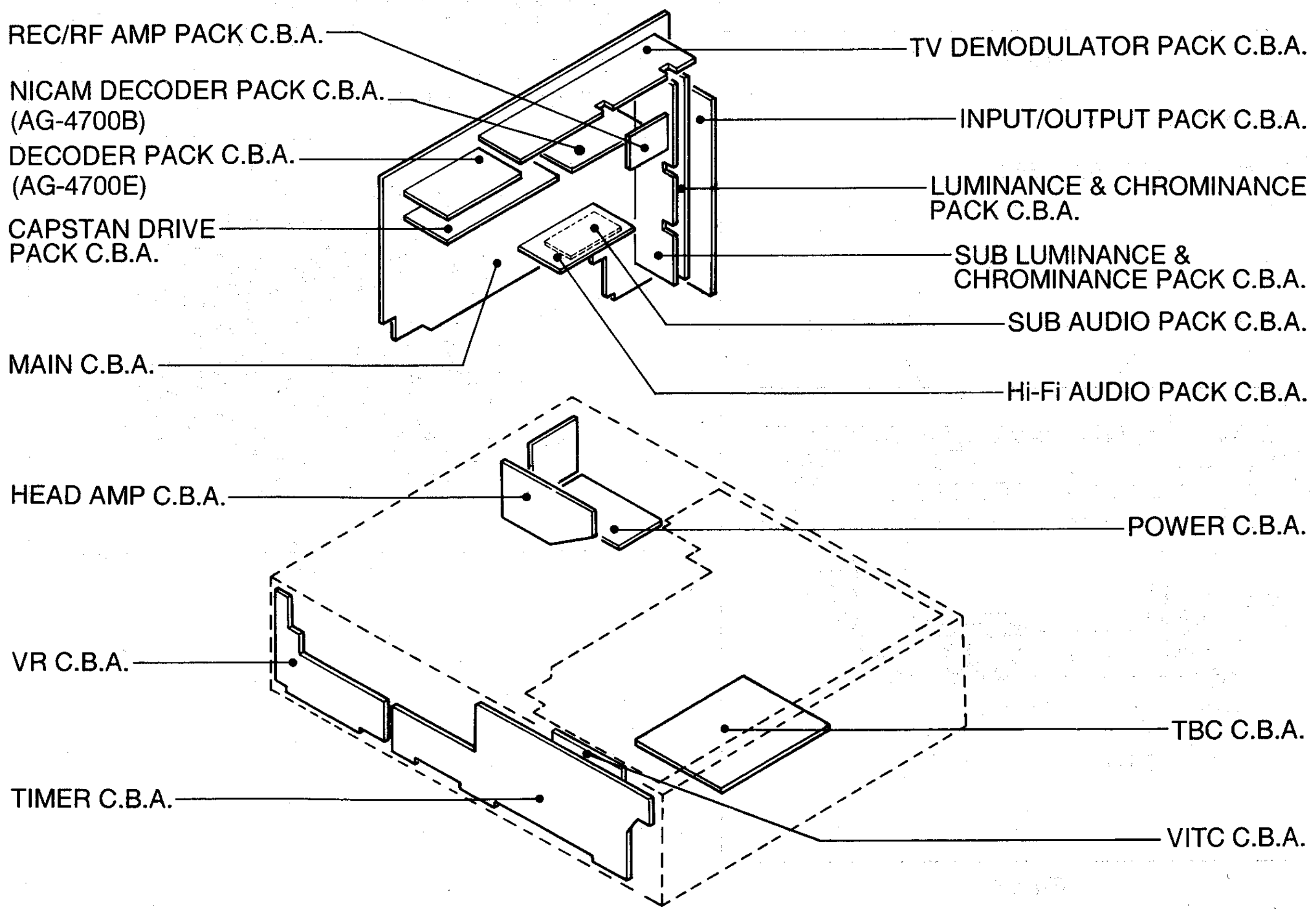
HEAD AMP C. B. A.


TP507
TP508
REC CURR.

INPUT/OUTPUT PACK C. B. A.



CIRCUIT BOARD LAYOUT


REC/RF AMP PACK C.B.A.
NICAM DECODER PACK C.B.A. (AG-4700B)
DECODER PACK C.B.A. (AG-4700E)
CAPSTAN DRIVE PACK C.B.A.
MAIN C.B.A.
TV DEMODULATOR PACK C.B.A.
INPUT/OUTPUT PACK C.B.A.
LUMINANCE & CHROMINANCE PACK C.B.A.
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
SUB AUDIO PACK C.B.A.
Hi-Fi AUDIO PACK C.B.A.
HEAD AMP C.B.A.
POWER C.B.A.
VR C.B.A.
TBC C.B.A.
TIMER C.B.A.
VITC C.B.A.

2-6. ELECTRICAL ADJUSTMENT PROCEDURES

This section provides complete adjustment procedures required for electric circuits of VHS Video Cassette Recorders.

2-6-1. TEST EQUIPMENT

To perform electrical adjustments following equipment is required.

1. Dual-Trace Oscilloscope. (More than 35MHz)
   Voltage Range: 0.005-5V/div
   Frequency Range: DC-35MHz
   Probes: 10:1 OR 1:1
2. Frequency Counter.
   Frequency Range: 0-10MHz
   Probes: 1:1
3. Universal Counter.
4. Digital Volt Meter. (D.V.M.)
5. Video Sweep Generator.
6. Sine Wave Generator.
7. Video Pattern Generator.
8. VHS Alignment Tape. (VFM8080HQFP)
9. VHS Blank Tape.
10. Monitor.
11. Plastic Tip Driver.
12. DC Power Supply.

2-6-2. PREPARATION

During adjustment, set each selector as follows: when no indication in the procedure.

NORMAL/Y/C/TEST SIGNAL SW (REAR)...NORMAL
VIDEO MODE SW..AUTO
AI SW..ON
EDIT MODE SW...RECORDER
HIFI/NORMAL MIX SW ....OFF
PICTURE VR..CENTRE FIX
HIFI REC LEVEL VR....................................CENTRE FIX
CHANNEL...A1/A2/A3
(Set to signal input terminal number)
TBC SW..OFF
16:9 SW..AUTO
AV3 INPUT SELECT SW ....S-VIDEO/LINE
(Set to signal input terminal)
S-VHS SW..ON
NICAM/MONO SW (AG-4700B)...................NICAM

2-6-3. HOW TO READ ADJUSTMENT PROCEDURES

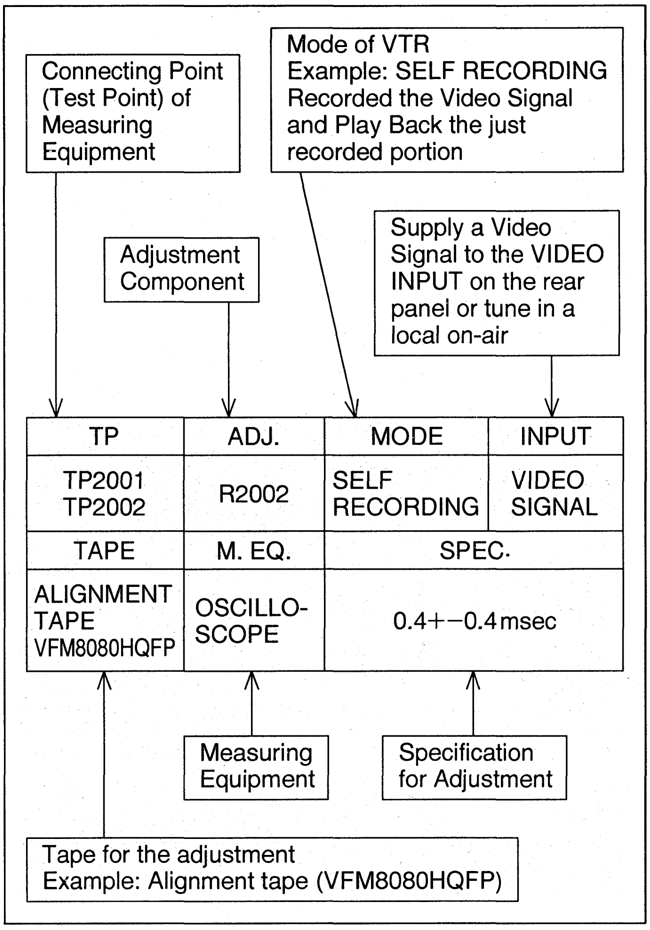

Connecting Point (Test Point) of Measuring Equipment
Mode of VTR
Example: SELF RECORDING
Recorded the Video Signal and Play Back the just recorded portion
Adjustment Component
Supply a Video Signal to the VIDEO INPUT on the rear panel or tune in a local on-air
TP
ADJ.
MODE
INPUT
TP2001
TP2002
R2002
SELF RECORDING
VIDEO SIGNAL
TAPE
M. EQ.
SPEC.
ALIGNMENT TAPE VFM8080HQFP
OSCILLO-SCOPE
0.4+−0.4 msec
Measuring Equipment
Specification for Adjustment
Tape for the adjustment
Example: Alignment tape (VFM8080HQFP)

Fig. E1

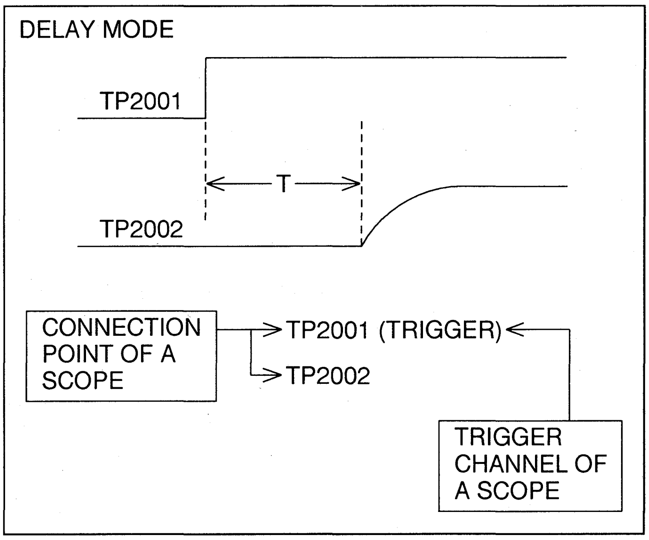

DELAY MODE
TP2001
T
TP2002
CONNECTION POINT OF A SCOPE
TP2001 (TRIGGER)
TP2002
TRIGGER CHANNEL OF A SCOPE

Fig. E2

SERVO SECTION

2-6-4. PG SHIFTER ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP2001 (TEST LAND) VIDEO OUT	VR2001	PLAYBACK	
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE VFM8080HQFP	OSCILLO-SCOPE	7.0+−1.0 (H)	

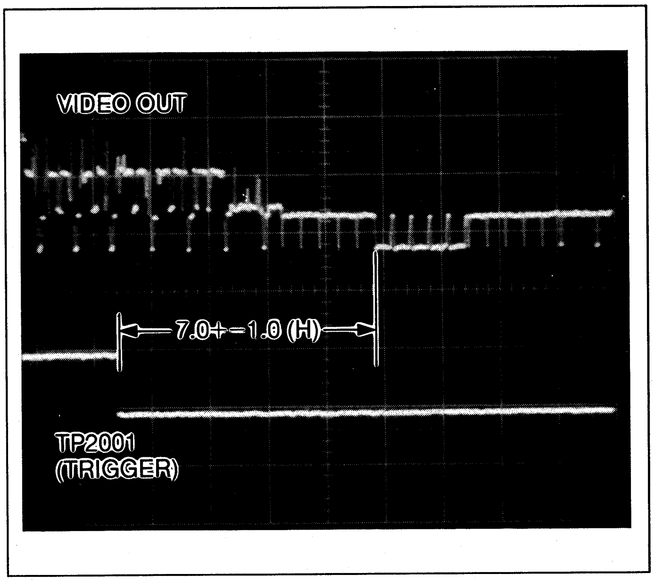


Fig. E3

2-6-5. SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2004 (SP) VR2002 (LP)	(SELF RECORDED) SLOW	CCIR PATTERN
TAPE	M. EQ.	SPEC.	
BLANK TAPE	MONITOR TV	Noise bar on the monitor screen is minimized. (Shown in Fig. E5)	

Note: 1. Before this adjustment, connect a jumper wire which has been cut as shown in Fig. E4.
2. After connecting a jumper wire, press the TRACKING (+) and (−) buttons on the Remote Controller simultaneously to set the tracking to centre fix position.
3. After this adjustment, disconnect a jumper wire.

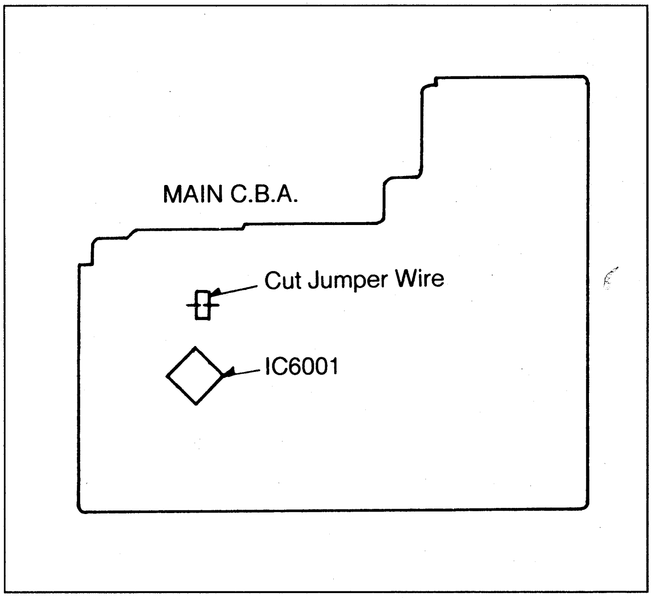


Fig. E4

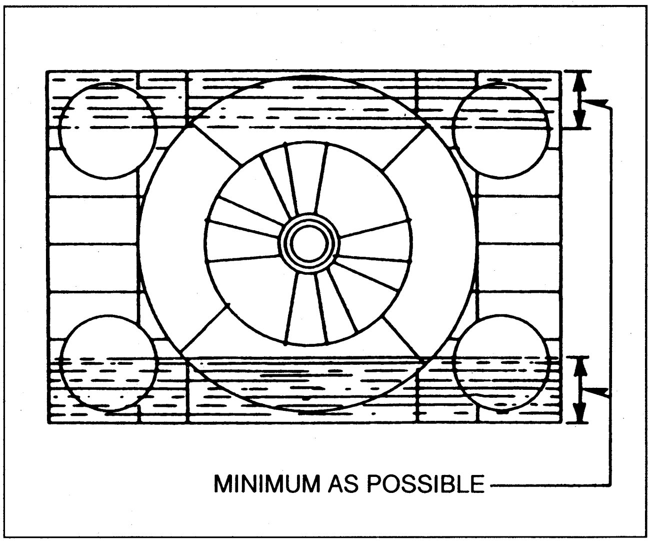


Fig. E5

2-6-6. REVERSE SLOW TRACKING ADJUSTMENT

TP	ADJ.	MODE	INPUT
MONITOR SCREEN	VR2005 (SP) VR2003 (LP)	(SELF RECORDED) REV SLOW	CCIR PATTERN
TAPE	**M. EQ.**	**SPEC.**	
BLANK TAPE	MONITOR TV	Noise bar on the monitor screen is minimized. (Shown in Fig. E5)	

REV SLOW: REVERSE SLOW

Note: 1. Before this adjustment, connect a jumper which has been cut as shown in Fig. E4.
2. After connecting a jumper wire, press the TRACKING (+) and (−) buttons on the Remote Controller simultaneously to set the tracking to centre fix position.
3. After this adjustment, disconnect a jumper wire.

2-6-7. AUTO TRACKING GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
PS3301-1	VR3301	STOP	SINEWAVE 4 MHz/200 mVp-p
TAPE	**M. EQ.**	**SPEC.**	
	SINEWAVE GENE./ D.V.M.	3.1+−0.1 (V)	

Note: 1. After connecting the Sinewave Generator to PS3303-2, set the signal level to 4 MHz/200 mVp-p.

LUMINANCE & CHROMINANCE SECTION

2-6-8. ARTIFICIAL PAL FREE RUN ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC802-9 (TL803)	VR803	STOP	
TAPE	**M. EQ.**	**SPEC.**	
	FREQUENCY COUNTER/ SINEWAVE GENERATOR	15735+−100 (Hz)	

Note: 1. Supply +5 V DC to IC802-27 (TL802).
2. Turn VR803 to maximum frequency, then adjust VR803 until the specification.

2-6-9. RECORDING CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP507 (HOT) TP508 (GND)	VR3001 (VHS Y) VR3002 (S-VHS Y) VR3003 (C)	SP RECORDING	PAL COLOUR BAR
TAPE	**M. EQ.**	**SPEC.**	
S-VHS BLANK TAPE	OSCILLO-SCOPE	VHS Y : 110+−5 (mVp-p) S-VHS Y: 120+−5 (mVp-p) C : 28+−2 (mVp-p)	

Note: 1. Set the AI SW to OFF position.
2. When adjusting the S-VHS Luminance level, set the S-VHS SW to ON position.
3. Turn the VR3002 to eliminate the Luminance component.
4. Adjust the Chrominance level until the peak level of Cyan is 28+−2mVp-p.
5. Adjust the Luminance level until the peak level of V-SYNC tip is 120+−5 mVp-p.
6. Set the S-VHS SW to OFF position.
7. Adjust the Luminance level until the peak level of V-SYNC tip is 110+−5mVp-p.

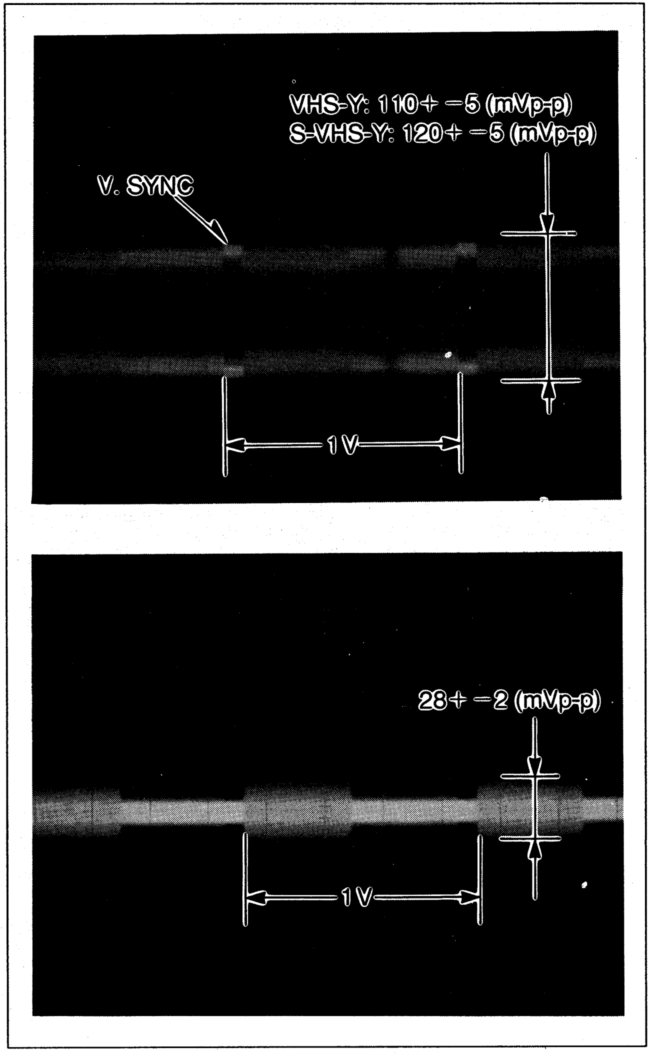
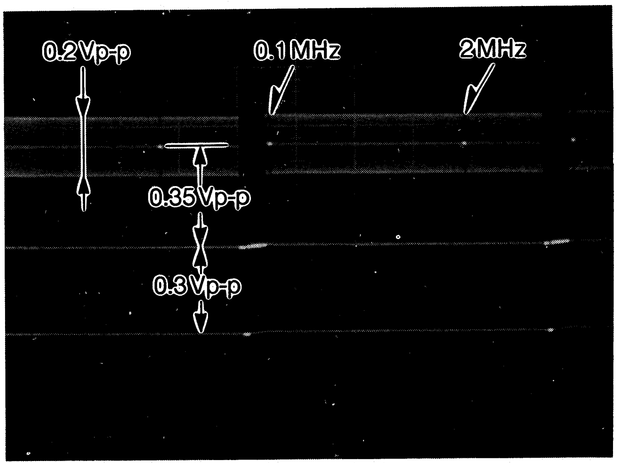


Fig. E6

2-6-10. VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR3305 (SP) VR3304 (LP)	SP/LP (SELF RECORDED) PLAYBACK	VIDEO SWEEP SIGNAL (Shown in Fig. E7)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SP: 0+−1(dB) (90−110%) LP: −1+−1(dB) (80−100%)	

Note: 1. Set the Video Sweep Signal as shown in Fig. E7.
2. Set the AI and S-VHS SW to OFF position.
3. Set the VIDEO MODE SW to B/W position.



CONDITION: BURST SIGNAL OFF
75 ohm TERMINATED

Fig. E7

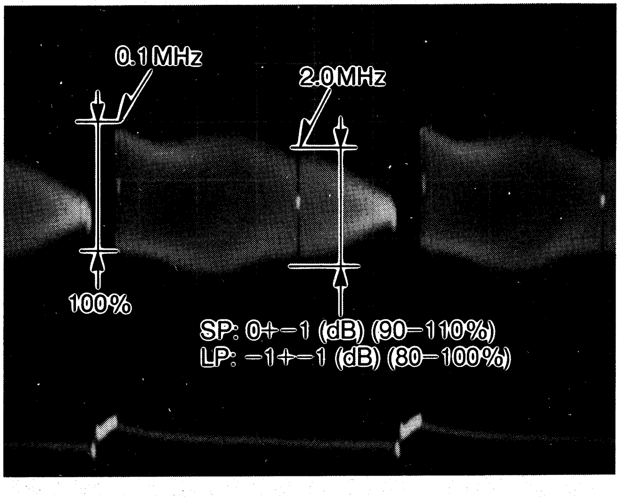
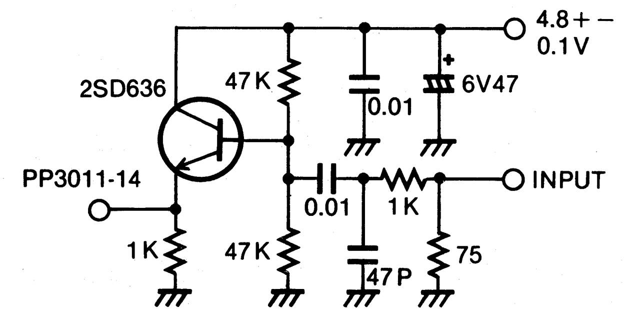


Fig. E8

2-6-11. RF PEAK FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
PP3011-18	VR3307	PLAYBACK	VIDEO SWEEP SIGNAL (PP3014-14)
TAPE	M. EQ.	SPEC.	
ALIGNMENT TAPE (VFM8080HQFP)	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SIGNAL LEVEL AT 7MHz PORTION IS MAXIMUM	

Note: 1. Connect the Service Circuit as shown in Fig. E9.
2. Disconnect P501 (from MAIN C.B.A. to HEAD AMP PACK C.B.A.).
3. Set VR3302 to centre position.
4. Connect a jumper wire between PP3011-5 and GND.
5. Set the Video Sweep Signal Generator (video signal only) as shown in Fig. E10.
6. Supply set up video sweep signal to PP3011-14 via Service Circuit.
7. Adjust VR3307 until the signal level at 7MHz portion is maximum as shown in Fig. E11.
8. After this adjustment, connect P501.



(Example)

75 ohm: ERDS2TJ750	0.01μ: ECCF1H104ZF
1Kohm: ERDS2TJ102	47P: ECCF1H470JC
47Kohm: ERD2TJ473	6V47μ: ECEA0JK470

Fig. E9

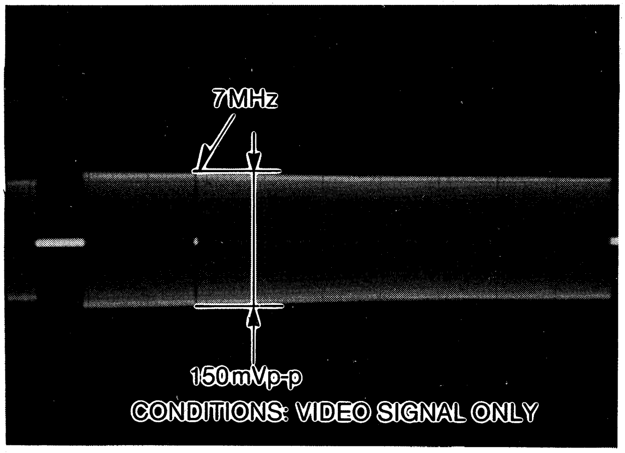


Fig. E10

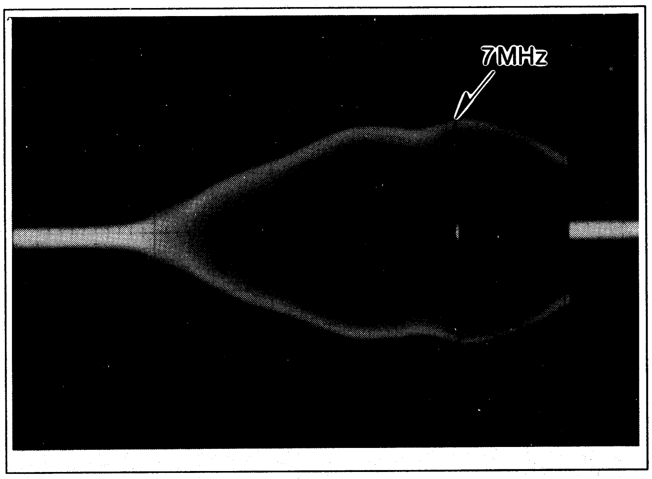
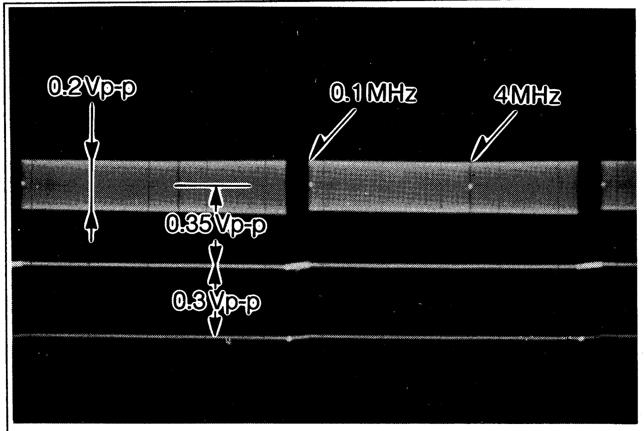


Fig. E11

2-6-12. S-VHS FREQUENCY RESPONSE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021	VR3302 (SP)	SP (SELF RECORDED) PLAYBACK	VIDEO SWEEP SIGNAL (P3002-10)
TAPE	M. EQ.	SPEC.	
S-VHS BLANK TAPE	OSCILLO-SCOPE/ VIDEO SWEEP GENERATOR	SP: −4.5+−1(dB) (55−70%)	

Note:
1. Before this adjustment, RF PEAK ADJUSTMENT must be done.
2. Set the Video Sweep Signal as shown in Fig. E12.
3. Set the AI SW to OFF position.
4. Connect a jumper wire between PP3003-5 and GND.
5. After this adjustment, disconnect the jumper wire.



CONDITION: BURST SIGNAL OFF
75 ohm TERMINATED

Fig. E12

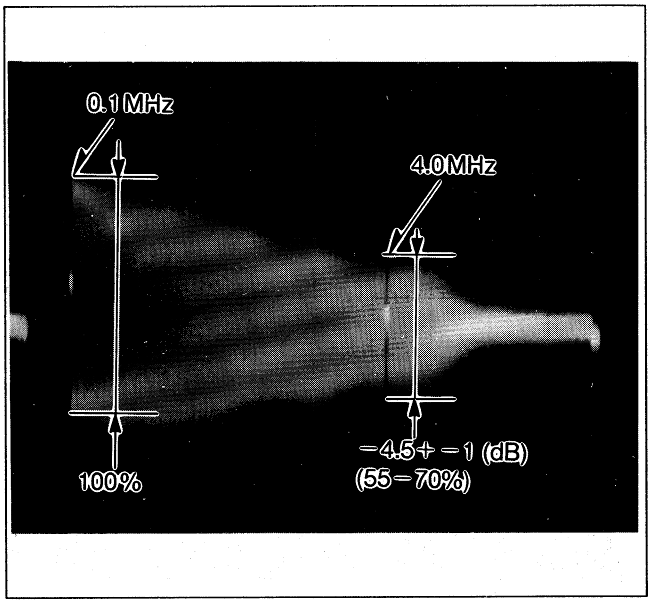


Fig. E13

2-6-13. VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3021 (Y) TP8021 (C)	VR302 (Y) VR804 (C)	SP (SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	Y: 2.0+−0.1 (Vp-p) C: 1.1+−0.1 (Vp-p)	

Note: 1. Set the S-VHS SW to OFF position.

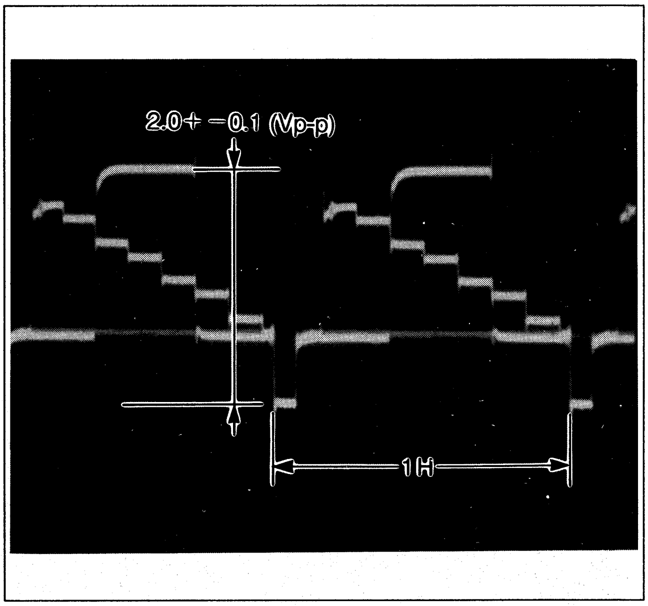


Fig. E14

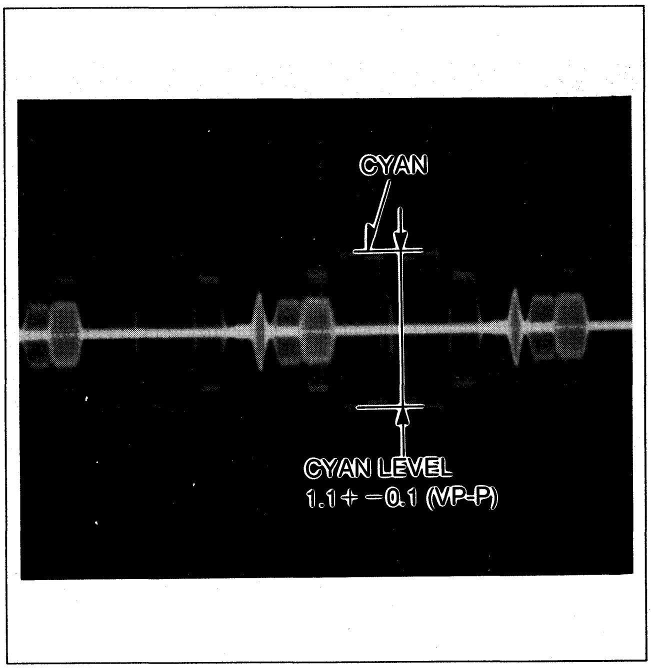


Fig. E15

2-6-14. S-VHS PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP3022 (Y1) TP3021 (Y2)	VR301 (Y1) VR304 (Y2)	SP (SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
S-VHS BLANK TAPE	OSCILLO-SCOPE	Y1: 0.38+−0.01(Vp-p) Y2: 2.0+−0.01(Vp-p)	

Note: 1. Set the S-VHS SW to ON position.
2. Before this adjustment, VHS PLAYBACK LEVEL ADJUSTMENT must be done.

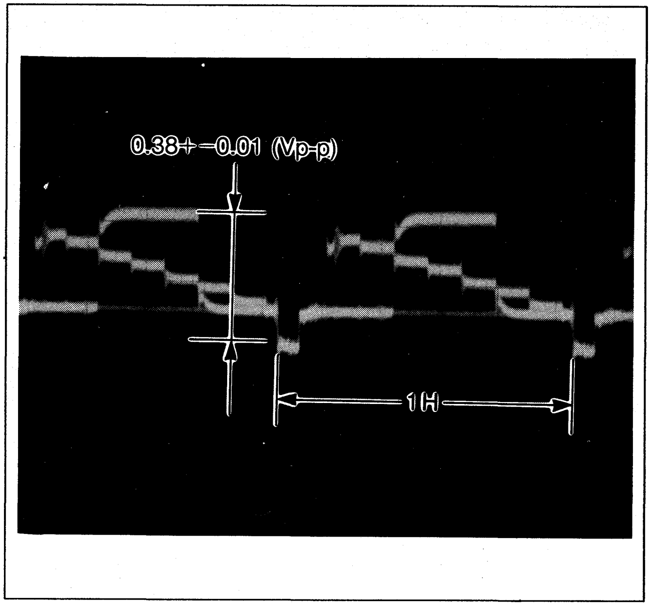


Fig. E16

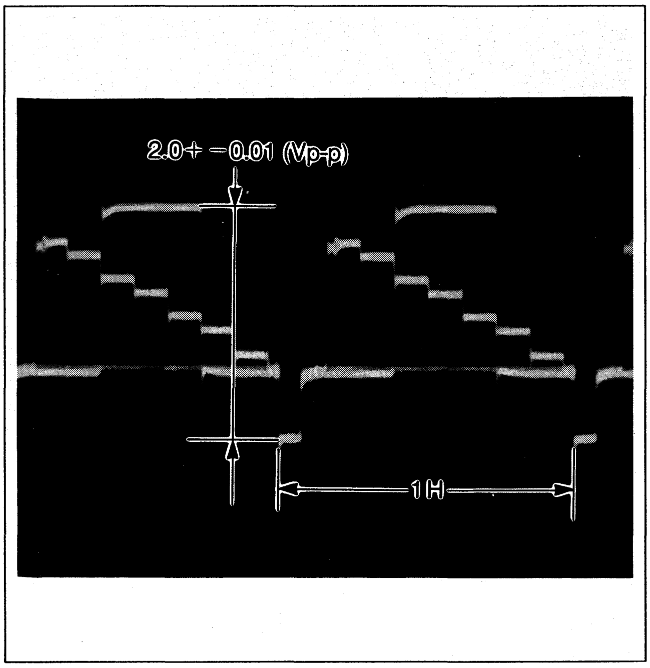


Fig. E17

2-6-15. YNR ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC301-34	VR303	LP RECORDING	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMUM	

Note: 1. Connect the capacitor (1500pF) between IC301-34 and GND as shown in Fig. E18.

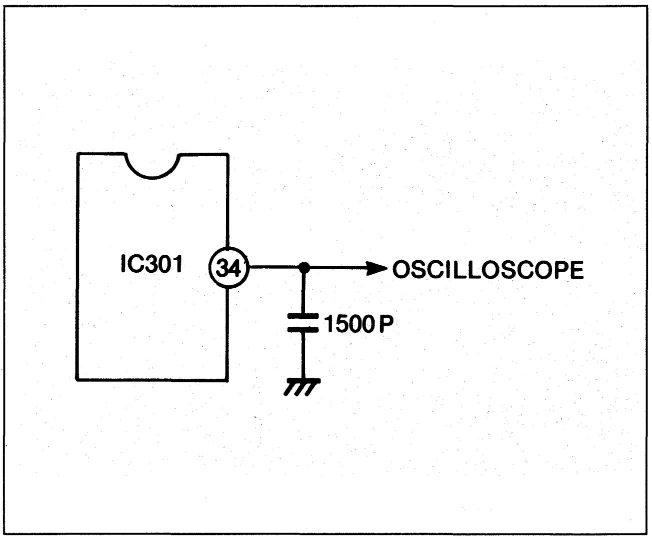


Fig. E18

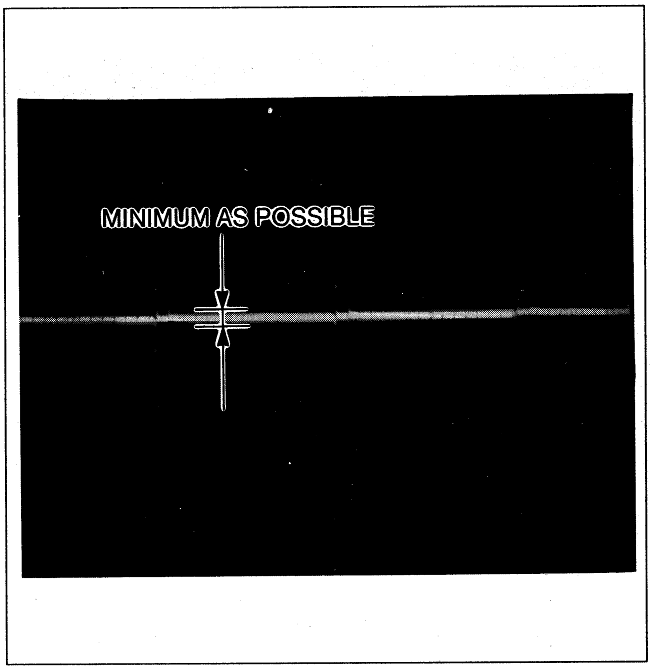


Fig. E19

2-6-16. CHROMINANCE RECURSIVE ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC801-7	VR801 VR802	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	WAVEFORM IS MINIMUM	

Note: 1. Before this adjustment, RECORDING CURRENT and YNR ADJUSTMENT must be done.
Note: 2. Adjust VR801 and VR802 alternately until the amplitude of the signal at IC801-7 is minimum.

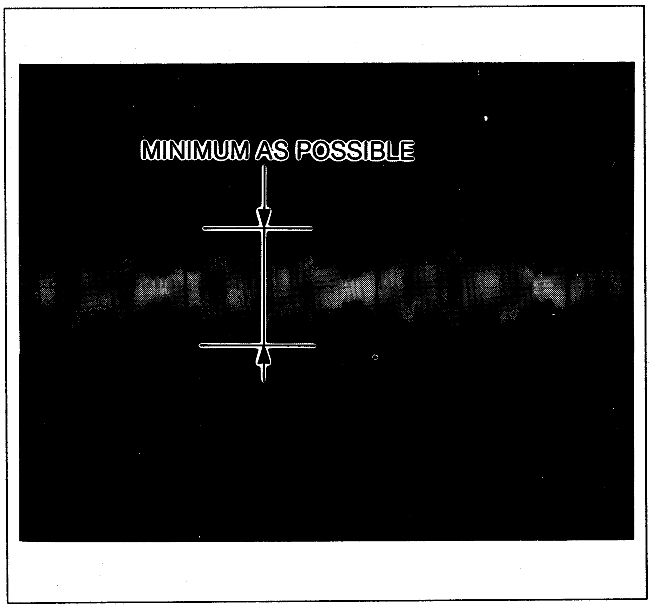


Fig. E20

2-6-17. 1H DELAY GAIN ADJUSTMENT

TP	ADJ.	MODE	INPUT
P9001-1 P9001-3	VR9501	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	SIGNAL LEVEL OF P9001-3 +−0.05 (Vp-p)	

Note: 1. Set the S-VHS and TBC SW to OFF position.
Note: 2. Connect the oscilloscope to P9001-1 and 3.
Note: 3. Adjust VR9501 until the level of P9001-1 is level of P9001-3 +−0.05 Vp-p.

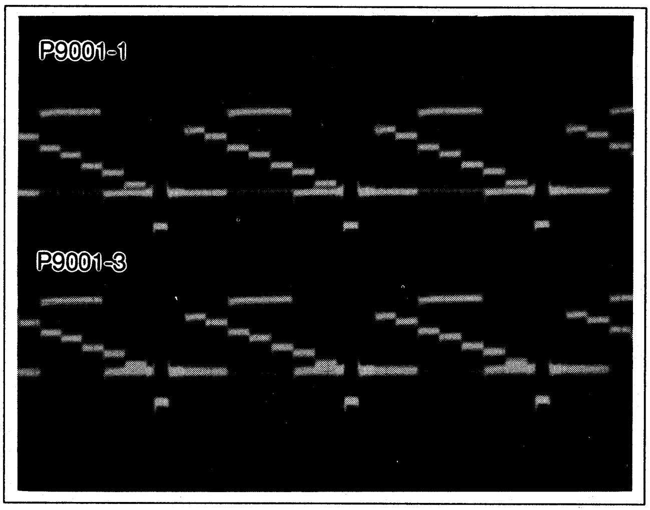


Fig. E21

2-6-18. TBC NOISE GATE ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP9001	VR9002	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	A=1.5+−0.1 (μsec)	

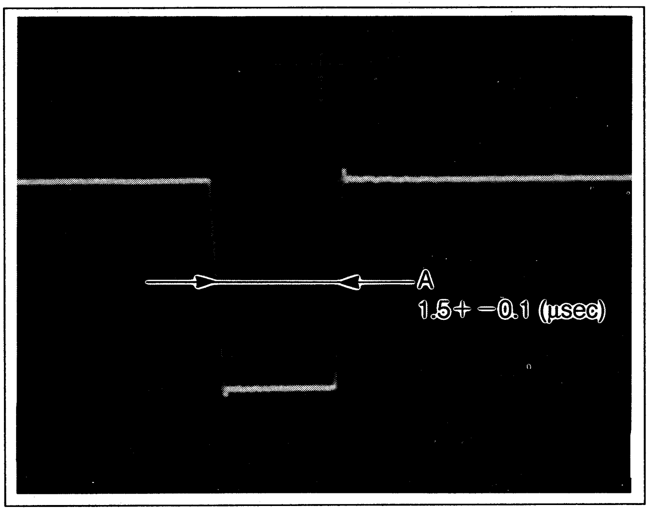


Fig. E22

2-6-19. TBC SYNC LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
P9001-1	VR9007	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	B=0.30+−0.05Vp-p	

Note: 1. Set the TBC SW to ON position.
Note: 2. Set the S-VHS SW to OFF position.

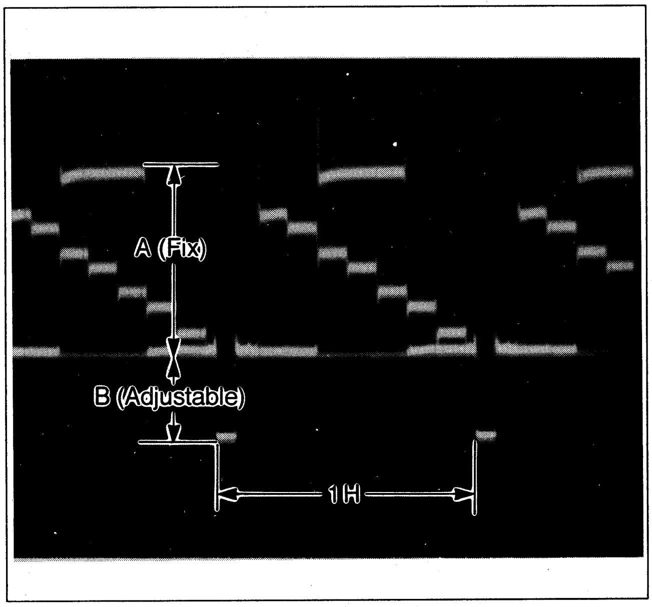


Fig. E23

2-6-20. TBC WHITE BALANCE ADJUSTMENT

TP	ADJ.	MODE	INPUT
P9001-5	VR9005 VR9006	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	SIGNAL LEVEL OF WHITE PORTION IS MINIMUM	

Note: 1. Set the TBC SW to ON position.
Note: 2. Before TBC R-Y LEVEL and TBC DIGITAL CHROMINANCE LEVEL ADJUSTMENT, this adjustment must be done.
Note: 3. Adjust VR9005 and VR9006 alternately until the signal level of white portion is minimum.

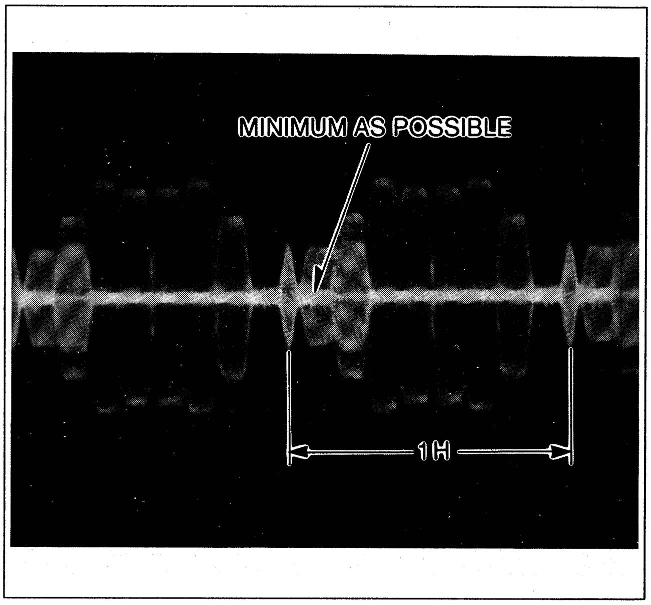


Fig. E24

2-6-21. TBC R-Y LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR9003	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	VECTOR-SCOPE	RED VECTOR PHASE DIFFERENCE IS +−3°	

Note: 1. Turn on the TBC SW and adjust VR9003 until the RED vector is +−3° compared with TBC off condition.
Note: 2. Confirm TBC R-Y LEVEL and TBC DIGITAL CHROMINANCE LEVEL ADJUSTMENT mutually when them adjust.

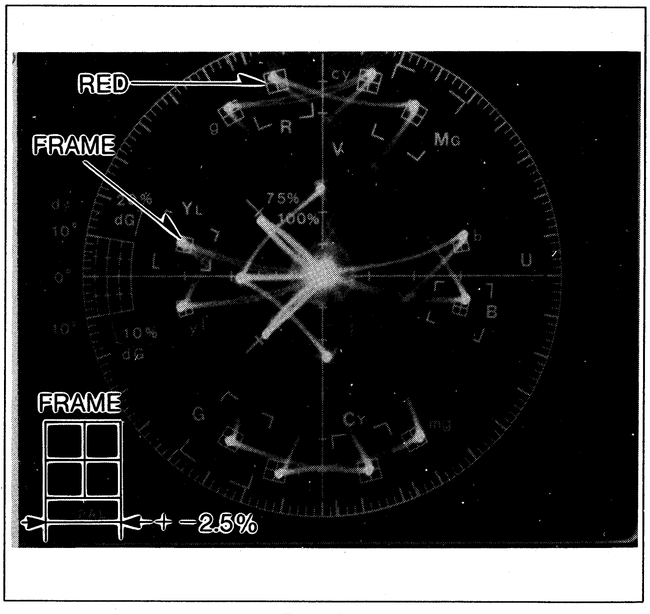


Fig. E25

2-6-22. TBC DIGITAL CHROMINANCE LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
VIDEO OUT	VR9004	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	VECTOR-SCOPE	BURST LEVEL IS THE SAME	

Note: 1. Turn off the TBC SW and adjust GAIN VR on vectorscope until the burst level is 75%.
2. Turn on the TBC SW and adjust VR9004 until the burst level is the same as TBC off condition (75%).

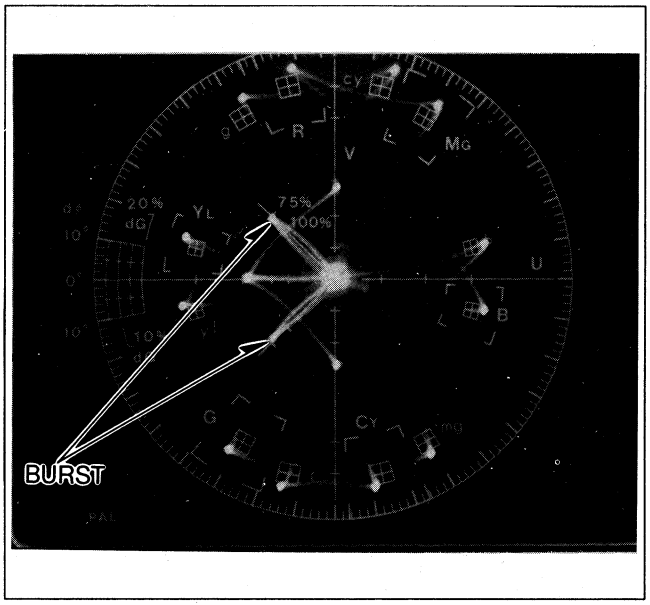


Fig. E26

2-6-23. TBC PLAYBACK LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
P9001-1	VR9001	(SELF RECORDED) PLAYBACK	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	100+−2.5 (%)	

Note: 1. Set the S-VHS SW to OFF position.
2. Connect the oscilloscope to P9001-1 and 3.
3. Adjust VR9001 until the signal level of P9001-1 is 100+−2.5% compared with signal level of P9001-3.

2-6-24. AGC LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
PP3023-1	VR3901	STOP	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
BLANK TAPE	OSCILLO-SCOPE	1.0+−0.05 (Vp-p)	

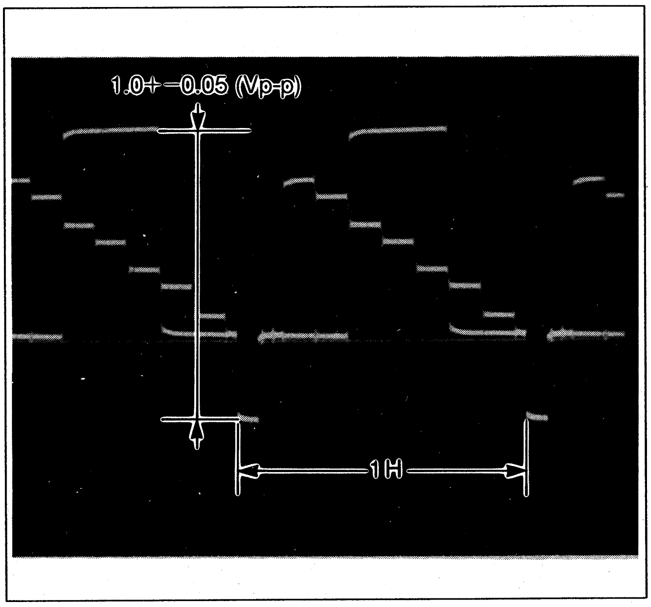


Fig. E27

AUDIO SECTION

2-6-25. BIAS CURRENT ADJUSTMENT

TP	ADJ.	MODE	INPUT
TP4002 (HOT/ TEST LAND) TP4003 (GND/ TEST LAND)	VR4002	RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	V.T.V.M.	3.0+−0.1 (mVrms)	

Note: 1. Connect a jumper wire between TP4004 and GND.
2. Set the S-VHS SW to OFF position.

2-6-26. HiFi E-E LEVEL ADJUSTMENT

TP	ADJ.	MODE	INPUT
AUDIO OUT (L)	VR4512	STOP	SINEWAVE 1 KHz/−6 dB (AUDIO IN (L))
TAPE	M. EQ.	SPEC.	
	V.T.V.M./ SINEWAVE GENERATOR	−8+−0.5 (dB)	

Note: 1. Select the STEREO mode by Remote Controller. (Both Left and Right indicators on the FIP are lit.)
2. Set the HIFI REC VR to FIX position.

2-6-27. CARRIER FREQUENCY ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-34 (L) IC4501-47 (R)	VR4501 (NTSC-L) VR4509 (NTSC-R) VR4551 (PAL-L) VR4552 (PAL-R)	SP RECORDING	
TAPE	M. EQ.	SPEC.	
BLANK TAPE	FREQUENCY COUNTER	NTSC-L: 1.3+−0.003 (MHz) NTSC-R: 1.7+−0.003 (MHz) PAL-L: 1.4+−0.003 (MHz) PAL-R: 1.8+−0.003 (MHz)	

Note: 1. When adjusting the NTSC mode, connect a jumper wire between PP3013-13 and GND.
2. When adjusting the PAL mode, disconnect a jumper wire.

2-6-28. DEVIATION ADJUSTMENT

TP	ADJ.	MODE	INPUT
BETWEEN VR4502 and R4511 (L) BETWEEN VR4507 and R4561 (R)	VR4502 (L) VR4507 (R)	SP RECORDING	SINEWAVE 1 KHz/−6 dB (AV1 IN)
TAPE	M. EQ.	SPEC.	
BLANK TAPE	V.T.V.M./ SINEWAVE GENERATOR	110 (mVrms)	

Note: 1. Before recording the sinewave, adjust the HIFI REC VR until the audio output level of AV1 is 400 mVrms.

2-6-29. FM B.P.F. ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC4501-33 (L) IC4501-48 (R)	VR4550	PLAYBACK	SINEWAVE 1.608 MHz/ 400 mVp-p (PS4003-8)
TAPE	M. EQ.	SPEC.	
NTSC RECORDED TAPE	OSCILLO-SCOPE/ SINEWAVE GENERATOR	Lch (IC4501-33)= Rch (IC4501-48)	

Note: 1. Disconnect P501 (from MAIN C.B.A. to HEAD AMP PACK C.B.A.).
2. Connect a jumper wire between PP4003-16 and GND.
3. The GND lead of oscilloscope must be connected to GND on HIFI AUDIO PACK C.B.A. to reduce the noise.
4. Supply the sinewave signal (1.608 MHz/400 mVp-p) to PS4003-8.
5. After this adjustment, connect P501 and disconnect the jumper wire.

TIMER SECTION

2-6-30. TIMER REFERENCE CLOCK ADJUSTMENT

TP	ADJ.	MODE	INPUT
TL7501	C7501	STOP	
TAPE	M. EQ.	SPEC.	
	UNIVERSAL COUNTER	7812.5+−0.015 (μsec)	

2-6-31. LEVEL METER SENSITIVITY ADJUSTMENT

TP	ADJ.	MODE	INPUT
LEVEL METER ON THE FIP	VR4004	STOP	SINEWAVE 1 KHz/−6 dB (AUDIO IN (L), (R))
TAPE	M. EQ.	SPEC.	
		0 dB INDICATOR ON THE AUDIO LEVEL METER JUST LIGHTS UP	

Note: 1. Select the STEREO mode.
(Both Left and Right indicators on the FIP are lit.)
2. Before recording the sinewave, adjust the HIFI REC VR until the signal level at Audio Output Terminal is 400 mVrms.

2-6-32. CHARACTER GENERATOR VCO ADJUSTMENT

TP	ADJ.	MODE	INPUT
IC3501-26 (TL3)	C3502	STOP	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
	V.T.V.M.	2.5+−0.25 V	

VITC SECTION

2-6-33. AGC ADJUSTMENT

TP	ADJ.	MODE	INPUT
TL16 (TEST LAND)	VR3801	STOP	PAL COLOUR BAR
TAPE	M. EQ.	SPEC.	
	OSCILLO-SCOPE	2.0+−0.1 (Vp-p)	

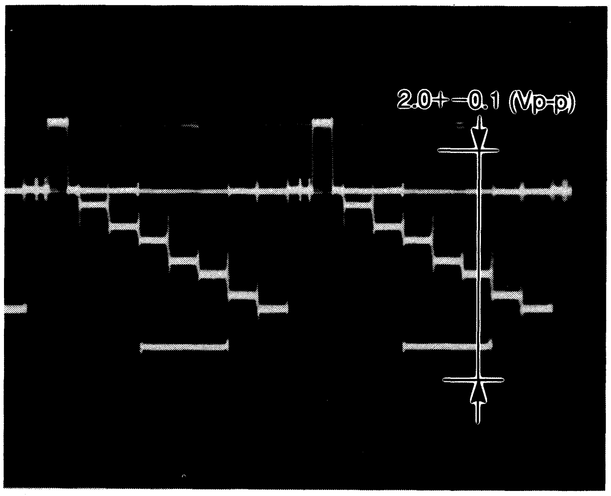
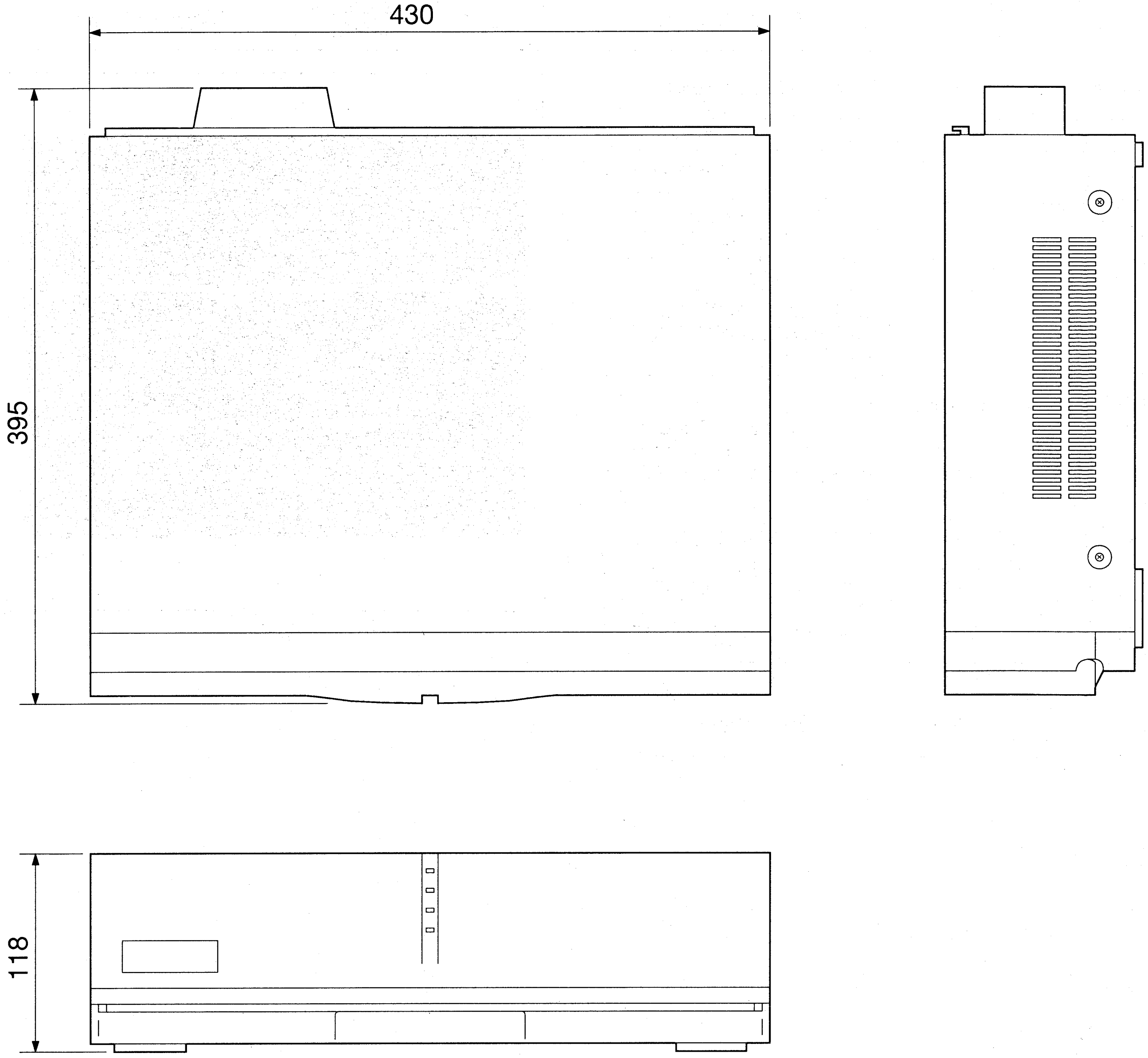


Fig. E28

2-7. DIMENSIONS



SECTION 3
BLOCK DIAGRAMS

3-1. ABBREVIATIONS

443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A. DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓛ
BIL. [H]	BILINGUAL Ⓗ
BIL/M1 [L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (−)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (−)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [−]	CONTROL HEAD (−)
CTL [+]	CONTROL HEAD (+)
CTL [−]	CONTROL HEAD (−)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMMITER
CYL ET	CYLINDER TORQUE CONTROL
CYL GND	CYLINDER GND
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ
D. FM REC [L]	DELAIED FM RECORDING Ⓛ
D. GND	DIGITAL GND

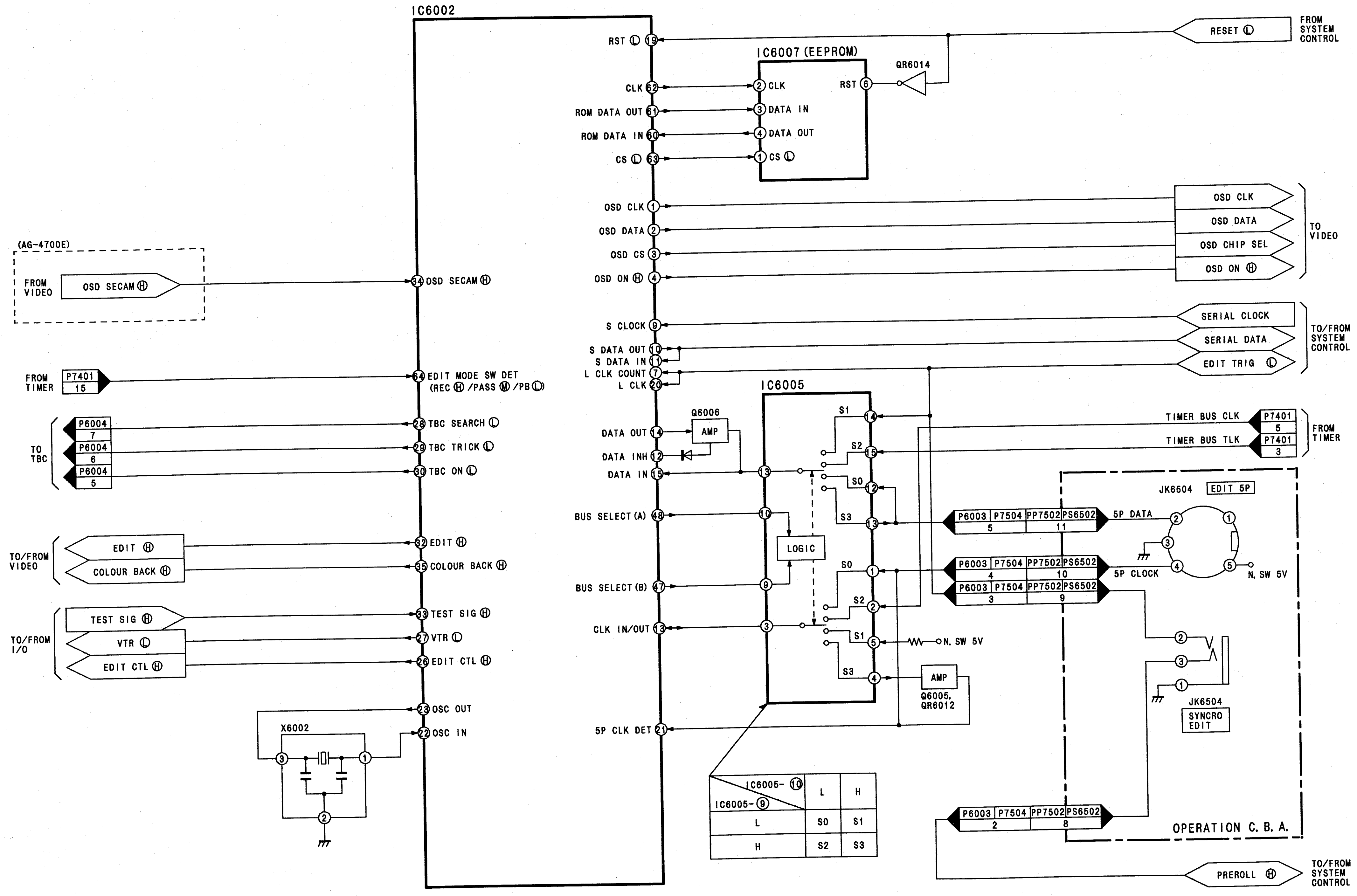
D. REC [H]	DELAYED RECORDING Ⓗ
D4/S. LED	D4/STILL LED
D4/STILLED	D4/STILL LED
DAC [CLK]	TUNER DAC (CLOCK)
DAC/FSCS	TUNER DAC/FS CHIP SELECT
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ
DATA	DATA
DECODER [L]	DECODER (L)
DECODER [R]	DECODER (R)
DEW	DEW
DEW SNS	DEW SENSOR
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ
E. REC 5V	EXCEPT RECORDING 5V
EC	ERROR TORQUE CONTROL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE
EDT TRIG [L]	EDIT TRIGGER Ⓛ
EDIT [H]	EDIT Ⓗ
EE [H]	EE Ⓗ
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ
EE. VV. TR	EE/VV/TRICK PLAY
EJECT. PO	EJECT POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK
ENV. SEL	ENVELOPE SELECT
ENVE. OUT	ENVELOPE OUTPUT
ENVE. SEL	ENVELOPE SELECT
ENV SELECT	ENVELOPE SELECT
EP [H]	LP Ⓗ
EP/LP [H]	LP Ⓗ
EP/LP/SP	LP/SP
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ
EPROMCS	EPROM CHIP SELECT
EX. REC 5V	EXCEPT RECORDING 5V
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ
FG1 IN	FG1 PULSE INPUT
FG2 IN	FG2 PULSE INPUT
FILTER ADJUSTMEN	FILTER ADJUSTMENT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ
FLY ON [H]	FLYING ERASE E HEAD ON Ⓗ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ
FM MUT [H]	FM AUDIO MUTE Ⓗ
FM MUTE [H]	FM AUDIO MUTE Ⓗ
FM OUT [L]	FM OUTPUT (L)
FM OUT [R]	FM OUTPUT (R)
FM PACK OUT [L]	FM PACK OUTPUT (L)
FM PACK OUT [R]	FM PACK OUTPUT (R)
FM/BS SEL [L]	FM/BS SELECT (L)
FM/BS SEL [R]	FM/BS SELECT (R)
FS. CLK	FS CLOCK
FUL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E. 12V	FULL ERASE 12V
GND [A]	GND (ANALOGUE)
GND [TU]	GND (TUNER)
GND/N. SW. 12V	GND/NON SW 12V

H. SYNC	HORIZONTAL SYNC
H. AMP. SW	HEAD AMP SW PULSE
H. P <R>	HEAD PHONE (R)
H. P <L>	HEAD PHONE (L)
H. P GND	HEAD PHONE GND
H. P OUT [L]	HEAD PHONE OUTPUT (L)
H. P OUT [R]	HEAD PHONE OUTPUT (R)
H. SW	HEAD SW PULSE
HEAD PHONE [L]	HEAD PHONE (L)
HEAD PHONE [R]	HEAD PHONE (R)
HEAD SW	HEAD SW
HEATER [+]	HEATER (+)
HEATER [−]	HEATER (−)
HSS	HORIZONTAL SYNC SIGNAL
HTR [+]	HEATER (+)
HTR [−]	HEATER (−)
I RFE	REFERENCE CURRENT
ICL	CONTROL AGC CIRCUIT
IF	INTERMEDIATE FREQUENCY
IN SELA1	INPUT SELECT A1 POSITION
IN SELA2	INPUT SELECT A2 POSITION
IN SELA3	INPUT SELECT A3 POSITION
INS L/R [L]	INSERT Lch/Rch Ⓛ
INS. [H]	INSERT Ⓗ
INSEL A1	INPUT SELECT A1 POSITION
INSEL A2	INPUT SELECT A2 POSITION
INSERT	INSERT
INSERT [H]	INSERT Ⓗ
IO CS	INPUT/OUTPUT CHIP SELECT
JOG1	JOG1
JOG S3 LED/FOWRD	JOG LED/FORWARD LED
JOG/F. LED	JOG LED/FORWARD LED
JSB [H]	JSB Ⓗ
JST. CLCK	JUST CLOCK
JST. CLK	JUST CLOCK
JST. CLOCK	JUST CLOCK
L. OUT	Lch OUTPUT
L. CH [H]	Lch Ⓗ
L. CH [L]	Lch Ⓛ
LED (MAIN)	LED (MAIN)
LED (STEREO)	LED (STEREO)
LED (SUB)	LED (SUB)
LED CKL	LED SERIAL CLOCK
LED CKS	LED SERIAL CLOCK
LED DATA	LED SERIAL DATA
LINE IN 1 [L]	LINE INPUT 1 (L)
LINE IN 1 [R]	LINE INPUT 1 (R)
LINE IN 2 [L]	LINE INPUT 2 (L)
LINE IN 2 [R]	LINE INPUT 2 (R)
LINE IN V	LINE INPUT VIDEO
LINE IN [L]	LINE INPUT (L)
LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	LINE OUTPUT (L)
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ

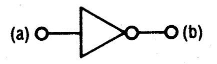
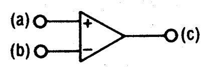
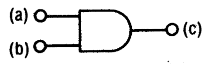
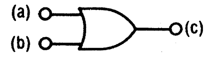
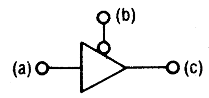
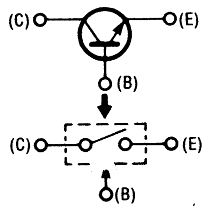
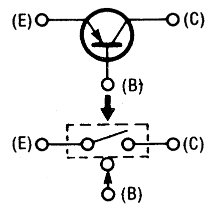
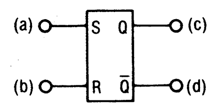
LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMAM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓗ/BILIGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ
MONO2 [L]	MONAURAL 2
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓛ
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓗ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT
P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	POWER OFF Ⓛ
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓗ
P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
PB ADJ OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN +B	PHOTO SENSOR +B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R. LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓗ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓗ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
RCH [H]	Rch Ⓗ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓛ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE (TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOROR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [−]	REVIEW MOTOR (−)
REV. M. GND	REVIEW MOTOR GND
RF. CHROMA	RF CHROMINANCE SIGNAL
RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT

ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [−]	SOLENOID (−)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL: ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	RERERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

3-2. EDIT BLOCK DIAGRAM

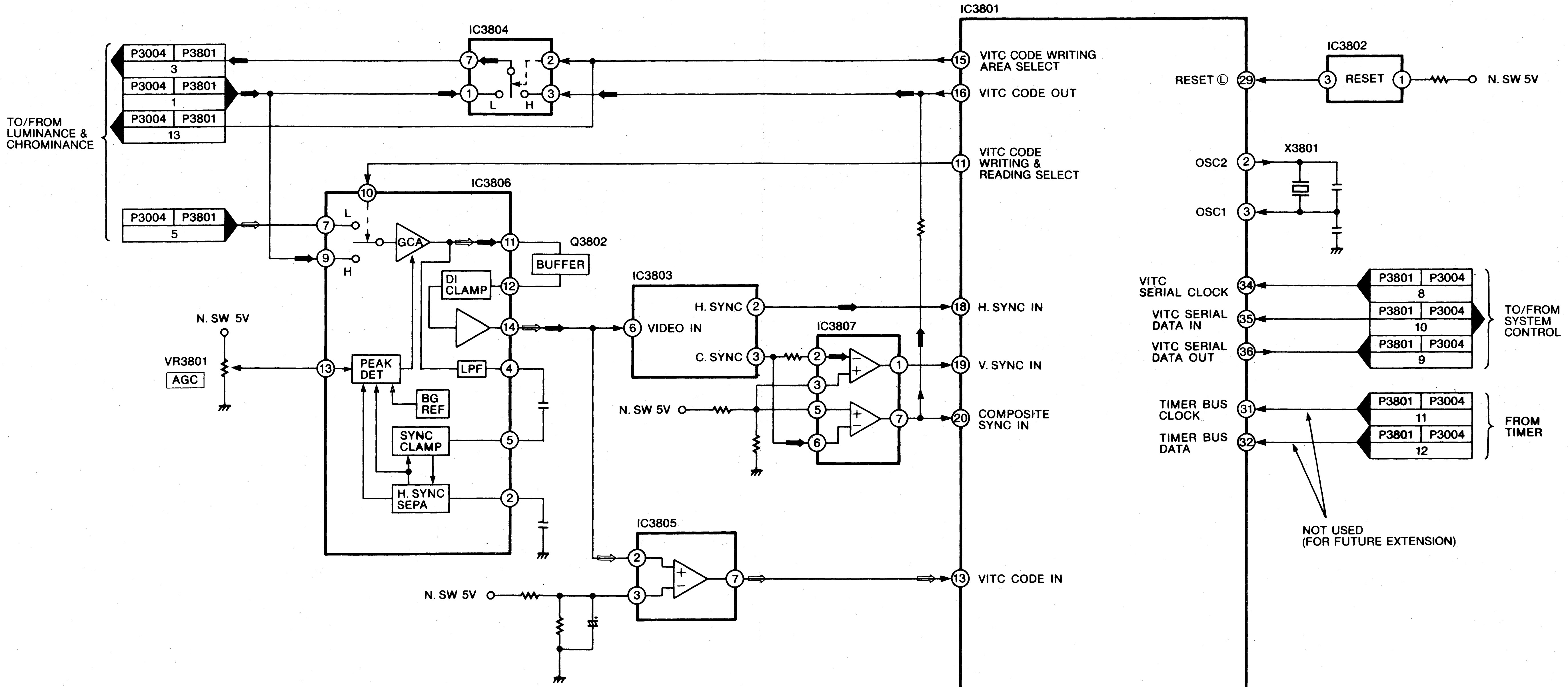

IC6002
RST Ⓛ ⑲
CLK 62
ROM DATA OUT 61
ROM DATA IN 60
CS Ⓛ 63
IC6007 (EEPROM)
② CLK
③ DATA IN
④ DATA OUT
① CS Ⓛ
RST ⑥
QR6014
RESET Ⓛ
FROM SYSTEM CONTROL
OSD CLK ①
OSD DATA ②
OSD CS ③
OSD ON Ⓗ ④
OSD CLK
OSD DATA
OSD CHIP SEL
OSD ON Ⓗ
TO VIDEO
S CLOCK ⑨
S DATA OUT ⑩
S DATA IN ⑪
L CLK COUNT ⑦
L CLK ⑳
SERIAL CLOCK
SERIAL DATA
EDIT TRIG Ⓛ
TO/FROM SYSTEM CONTROL
(AG-4700E)
FROM VIDEO
OSD SECAM Ⓗ
34 OSD SECAM Ⓗ
FROM TIMER
P7401
15
64 EDIT MODE SW DET
(REC Ⓗ /PASS Ⓜ /PB Ⓛ)
TO TBC
P6004
7
P6004
6
P6004
5
28 TBC SEARCH Ⓛ
29 TBC TRICK Ⓛ
30 TBC ON Ⓛ
TO/FROM VIDEO
EDIT Ⓗ
COLOUR BACK Ⓗ
32 EDIT Ⓗ
35 COLOUR BACK Ⓗ
TO/FROM I/O
TEST SIG Ⓗ
VTR Ⓛ
EDIT CTL Ⓗ
33 TEST SIG Ⓗ
27 VTR Ⓛ
26 EDIT CTL Ⓗ
23 OSC OUT
22 OSC IN
X6002
③
①
②
Q6006
AMP
DATA OUT ⑭
DATA INH ⑫
DATA IN ⑮
BUS SELECT (A) 48
BUS SELECT (B) 47
CLK IN/OUT ⑬
5P CLK DET 21
IC6005
S1
S2
S0
S3
LOGIC
⑭
⑮
⑫
⑬
⑩
⑨
③
①
②
⑤
④
N. SW 5V
AMP
Q6005, QR6012
TIMER BUS CLK
TIMER BUS TLK
P7401
5
P7401
3
FROM TIMER
JK6504
EDIT 5P
P6003 P7504 PP7502 PS6502
5 11
5P DATA
P6003 P7504 PP7502 PS6502
4 10
5P CLOCK
P6003 P7504 PP7502 PS6502
3 9
N. SW 5V
JK6504
SYNCRO EDIT
P6003 P7504 PP7502 PS6502
2 8
OPERATION C. B. A.
PREROLL Ⓗ
TO/FROM SYSTEM CONTROL

IC6005-⑩ / IC6005-⑨	L	H
L	S0	S1
H	S2	S3

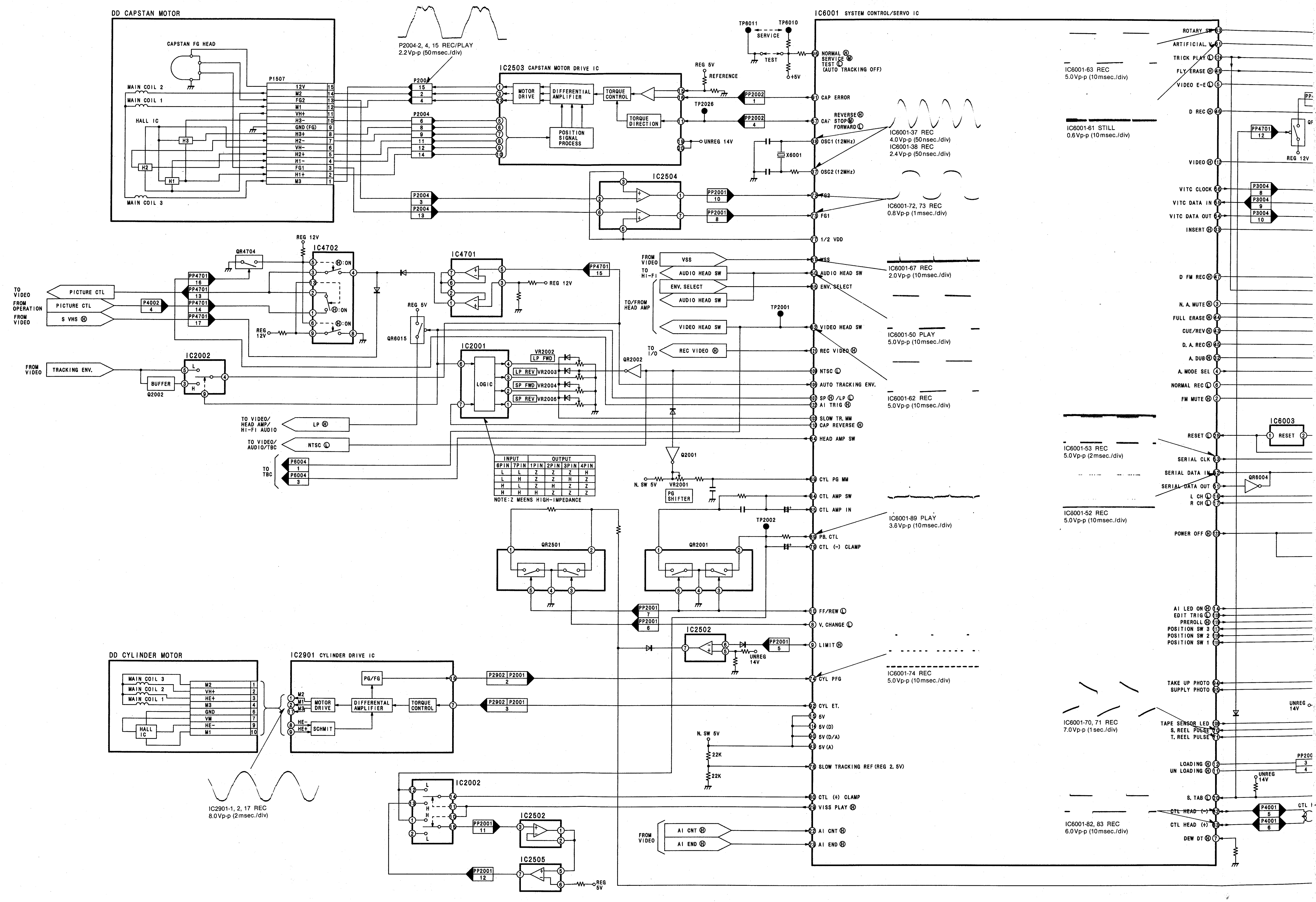
<table>
<tr><th>SYMBOL</th><th>TRUTH VALUE TABLE</th></tr>
<tr><td>INVERTER
 </td><td>
<table>
<tr><td>IN</td><td>(a)</td><td>H</td><td>L</td></tr>
<tr><td>OUT</td><td>(b)</td><td>L</td><td>H</td></tr>
</table></td></tr>
<tr><td>COMPARTOR
 </td><td>
<table>
<tr><td>IN</td><td>(a)
(b)</td><td>(a)>(b)</td><td>(a)<(b)</td></tr>
<tr><td>OUT</td><td>(c)</td><td>H</td><td>L</td></tr>
</table></td></tr>
<tr><td>AND CIRCUIT
 </td><td>
<table>
<tr><td rowspan="2">IN</td><td>(a)</td><td>L</td><td>L</td><td>H</td><td>H</td></tr>
<tr><td>(b)</td><td>L</td><td>H</td><td>L</td><td>H</td></tr>
<tr><td>OUT</td><td>(c)</td><td>L</td><td>L</td><td>L</td><td>H</td></tr>
</table></td></tr>
<tr><td>OR CIRCUIT
 </td><td>
<table>
<tr><td rowspan="2">IN</td><td>(a)</td><td>L</td><td>L</td><td>H</td><td>H</td></tr>
<tr><td>(b)</td><td>L</td><td>H</td><td>L</td><td>H</td></tr>
<tr><td>OUT</td><td>(c)</td><td>L</td><td>H</td><td>H</td><td>H</td></tr>
</table></td></tr>
<tr><td>THREE STATES BUFFER
 </td><td>
<table>
<tr><td rowspan="2">IN</td><td>(a)</td><td>H</td><td>L</td><td>H or L</td></tr>
<tr><td>(b)</td><td>L</td><td>L</td><td>H</td></tr>
<tr><td>OUT</td><td>(c)</td><td>H</td><td>L</td><td>※</td></tr>
</table>
※ High Impedance</td></tr>
<tr><td>TR. SW (NPN TYPE)
 </td><td>
<table>
<tr><td>BASE</td><td>H</td><td>L</td></tr>
<tr><td>TR. SW</td><td>ON</td><td>OFF</td></tr>
</table></td></tr>
<tr><td>TR. SW (PNP TYPE)
 </td><td>
<table>
<tr><td>BASE</td><td>H</td><td>L</td></tr>
<tr><td>TR. SW</td><td>OFF</td><td>ON</td></tr>
</table></td></tr>
<tr><td>R-S TYPE FLIP-FLOP
 </td><td>
<table>
<tr><td rowspan="2">IN</td><td>(a)</td><td>L</td><td>L</td><td>⎍</td></tr>
<tr><td>(b)</td><td>L</td><td>⎍</td><td>L</td></tr>
<tr><td rowspan="2">OUT</td><td>(c)</td><td>※</td><td>L</td><td>H</td></tr>
<tr><td>(d)</td><td>◆</td><td>H</td><td>L</td></tr>
</table>
※ Initial condition is maintained.
◆ Initial condition is reversed.</td></tr>
</table>

3-3. VITC BLOCK DIAGRAM

⬅ MAIN SIGNAL PATH IN REC MODE ⇦ MAIN SIGNAL PATH IN PLAYBACK MODE

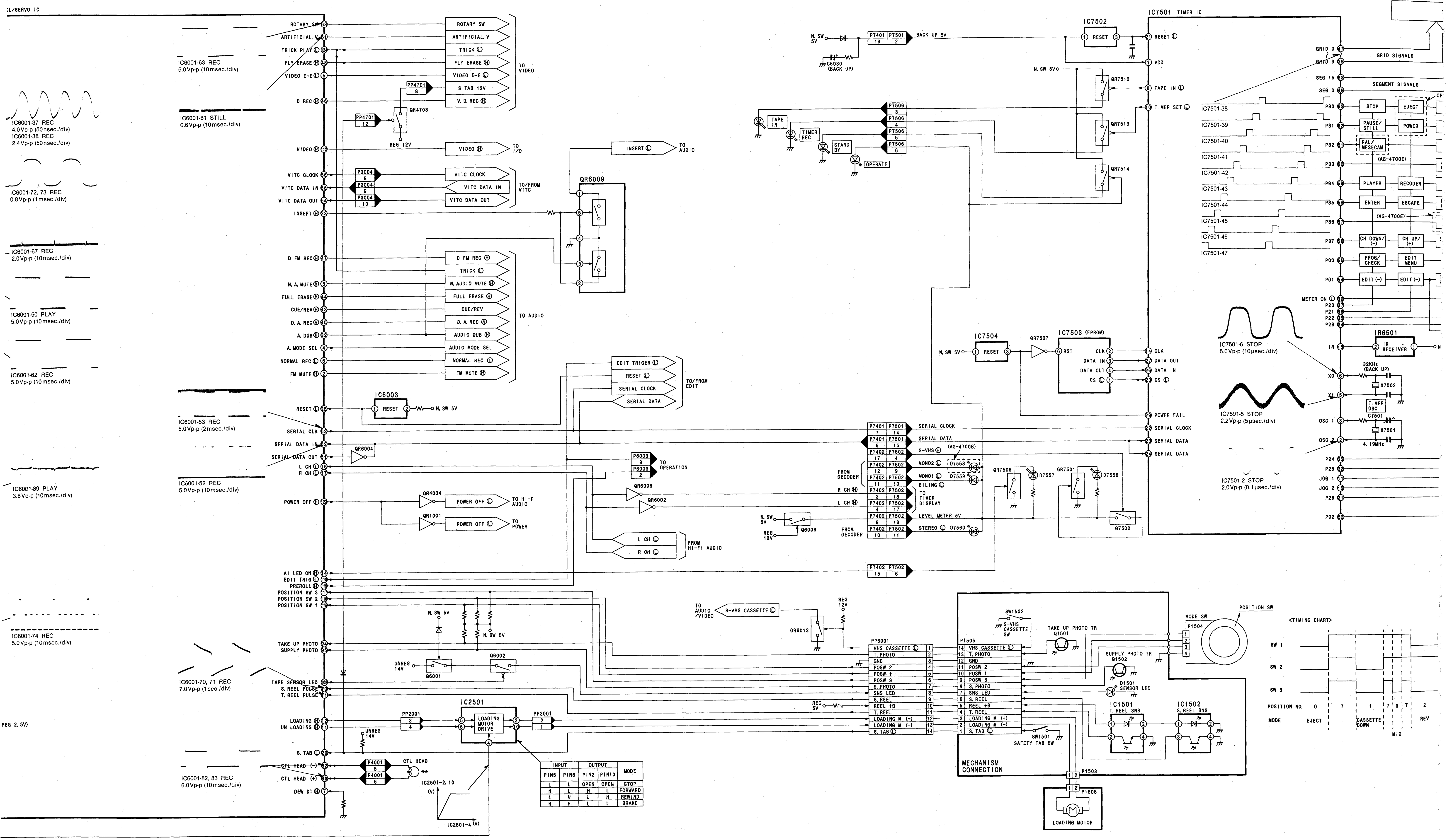

IC3801
IC3804
IC3802
IC3806
IC3803
IC3807
IC3805
Q3802
BUFFER
X3801
VR3801
AGC
TO/FROM LUMINANCE & CHROMINANCE
P3004 P3801 3
P3004 P3801 1
P3004 P3801 13
P3004 P3801 5
L
H
GCA
DI CLAMP
PEAK DET
LPF
BG REF
SYNC CLAMP
H. SYNC SEPA
N. SW 5V
H. SYNC
VIDEO IN
C. SYNC
VITC CODE WRITING AREA SELECT
VITC CODE OUT
VITC CODE WRITING & READING SELECT
H. SYNC IN
V. SYNC IN
COMPOSITE SYNC IN
VITC CODE IN
RESET Ⓛ
RESET
OSC2
OSC1
VITC SERIAL CLOCK
VITC SERIAL DATA IN
VITC SERIAL DATA OUT
TIMER BUS CLOCK
TIMER BUS DATA
P3801 P3004 8
P3801 P3004 10
P3801 P3004 9
P3801 P3004 11
P3801 P3004 12
TO/FROM SYSTEM CONTROL
FROM TIMER
NOT USED (FOR FUTURE EXTENSION)

3-4. SYSTEM CONTROL & SERVO BLOCK DIAGRAM

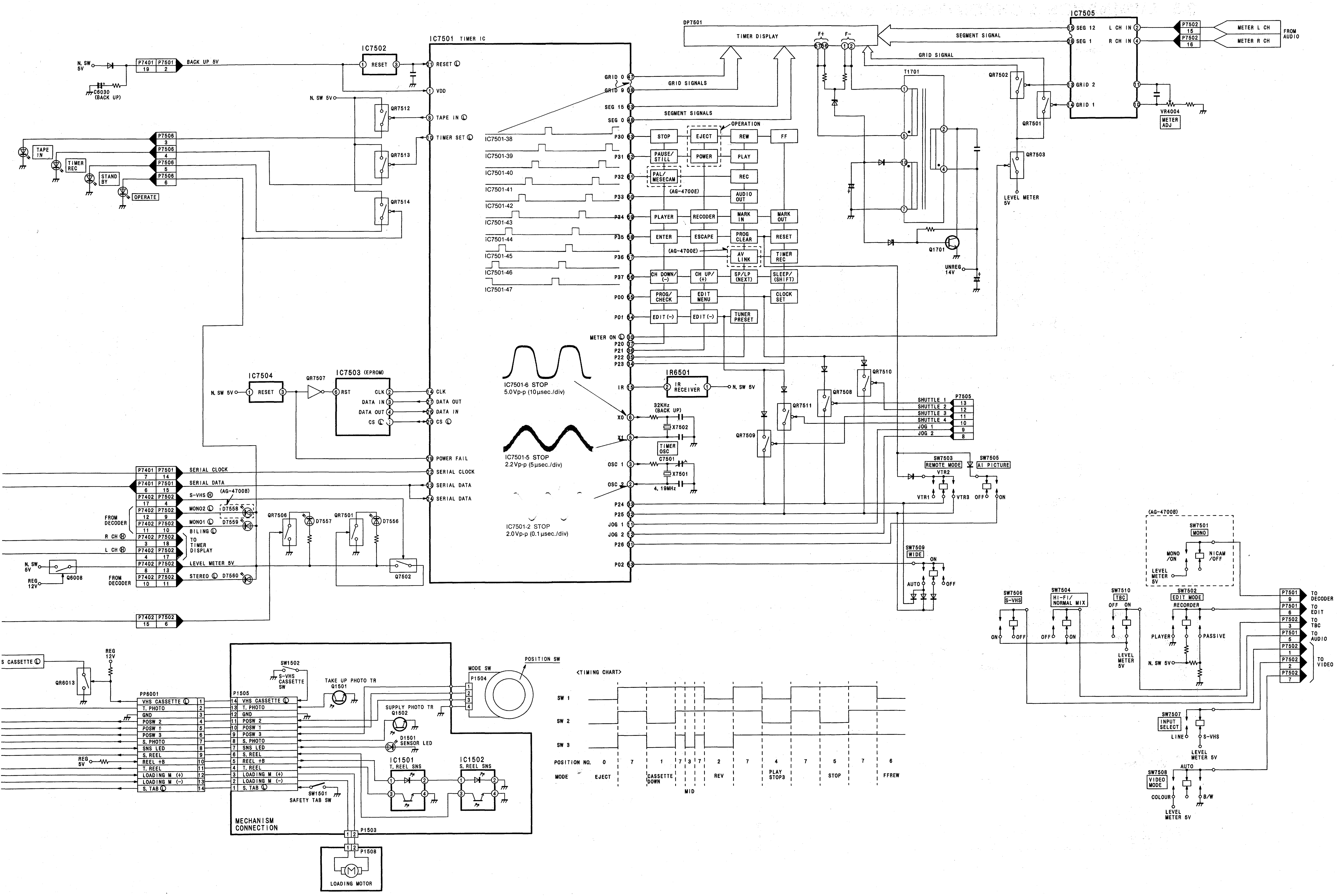

DD CAPSTAN MOTOR
CAPSTAN FG HEAD
MAIN COIL 2
MAIN COIL 1
HALL IC
H3
H2
H1
MAIN COIL 3
P1507
12V
M2
FG2
M1
VH+
H3-
GND (FG)
H3+
H2-
VH-
H2+
H1-
FG1
H1+
M3
P2004-2, 4, 15 REC/PLAY
2.2Vp-p (50msec./div)
P2004
IC2503 CAPSTAN MOTOR DRIVE IC
MOTOR DRIVE
DIFFERENTIAL AMPLIFIER
TORQUE CONTROL
TORQUE DIRECTION
POSITION SIGNAL PROCESS
IC2504
TP6011
TP6010
SERVICE
TEST
+5V
REG 5V
REFERENCE
TP2026
UNREG 14V
PP2002
PP2001
X6001
IC6001 SYSTEM CONTROL/SERVO IC
NORMAL Ⓗ
SERVICE Ⓜ
TEST Ⓛ
(AUTO TRACKING OFF)
CAP ERROR
REVERSE Ⓗ
CAP STOP Ⓜ
FORWARD Ⓛ
OSC1 (12MHz)
OSC2 (12MHz)
FG2
FG1
1/2 VDD
VSS
AUDIO HEAD SW
ENV. SELECT
VIDEO HEAD SW
REC VIDEO Ⓗ
NTSC Ⓛ
AUTO TRACKING ENV.
SP Ⓗ /LP Ⓛ
AI TRIG Ⓗ
SLOW TR. MM
CAP REVERSE Ⓗ
HEAD AMP SW
CYL PG MM
CTL AMP SW
CTL AMP IN
PB. CTL
CTL (-) CLAMP
FF/REW Ⓛ
V. CHANGE Ⓛ
LIMIT Ⓗ
CYL PFG
CYL ET.
5V
5V (D)
5V (D/A)
5V (A)
SLOW TRACKING REF (REG 2.5V)
CTL (+) CLAMP
VISS PLAY Ⓗ
AI CNT Ⓗ
AI END Ⓗ
IC6001-37 REC
4.0Vp-p (50nsec./div)
IC6001-38 REC
2.4Vp-p (50nsec./div)
IC6001-72, 73 REC
0.8Vp-p (1msec./div)
IC6001-67 REC
2.0Vp-p (10msec./div)
IC6001-50 PLAY
5.0Vp-p (10msec./div)
IC6001-62 REC
5.0Vp-p (10msec./div)
IC6001-89 PLAY
3.6Vp-p (10msec./div)
IC6001-74 REC
5.0Vp-p (10msec./div)
IC6001-63 REC
5.0Vp-p (10msec./div)
IC6001-61 STILL
0.6Vp-p (10msec./div)
IC6001-53 REC
5.0Vp-p (2msec./div)
IC6001-52 REC
5.0Vp-p (10msec./div)
IC6001-70, 71 REC
7.0Vp-p (1sec./div)
IC6001-82, 83 REC
6.0Vp-p (10msec./div)
ROTARY SW
ARTIFICIAL. V
TRICK PLAY Ⓛ
FLY ERASE Ⓗ
VIDEO E-E Ⓛ
D REC Ⓗ
PP4701
REG 12V
VIDEO Ⓗ
VITC CLOCK
VITC DATA IN
VITC DATA OUT
P3004
INSERT Ⓗ
D FM REC Ⓗ
N. A. MUTE Ⓗ
FULL ERASE Ⓗ
CUE/REV Ⓗ
D. A. REC Ⓗ
A. DUB Ⓗ
A. MODE SEL
NORMAL REC Ⓛ
FM MUTE Ⓗ
IC6003
RESET Ⓛ
RESET
SERIAL CLK
SERIAL DATA IN
SERIAL DATA OUT
QR6004
L CH Ⓛ
R CH Ⓛ
POWER OFF Ⓗ
AI LED ON Ⓗ
EDIT TRIG Ⓛ
PREROLL Ⓗ
POSITION SW 3
POSITION SW 2
POSITION SW 1
TAKE UP PHOTO
SUPPLY PHOTO
UNREG 14V
TAPE SENSOR LED
S. REEL PULSE
T. REEL PULSE
LOADING Ⓗ
UN LOADING Ⓗ
P2200
S. TAB Ⓛ
CTL HEAD (-)
CTL HEAD (+)
P4001
DEW DT Ⓗ
QR4704
REG 12V
IC4702
Ⓗ:ON
IC4701
TO VIDEO
FROM OPERATION
FROM VIDEO
PICTURE CTL
S VHS Ⓗ
P4002
REG 5V
QR6015
IC2002
FROM VIDEO
TRACKING ENV.
BUFFER
Q2002
IC2001
LOGIC
VR2002
LP FWD
LP REV
VR2003
SP FWD
VR2004
SP REV
VR2005
QR2002
FROM VIDEO
TO HI-FI
VSS
AUDIO HEAD SW
ENV. SELECT
TO/FROM HEAD AMP
VIDEO HEAD SW
TO I/O
REC VIDEO Ⓗ
TP2001
TO VIDEO/ HEAD AMP/ HI-FI AUDIO
LP Ⓗ
TO VIDEO/ AUDIO/TBC
NTSC Ⓛ
TO TBC
P6004
Q2001
N. SW 5V
VR2001
PG SHIFTER
TP2002
QR2501
QR2001
IC2502
UNREG 14V
DD CYLINDER MOTOR
MAIN COIL 3
MAIN COIL 2
MAIN COIL 1
HALL IC
M2
VH+
HE+
M3
GND
VM
HE-
M1
IC2901 CYLINDER DRIVE IC
PG/FG
MOTOR DRIVE
DIFFERENTIAL AMPLIFIER
TORQUE CONTROL
SCHMIT
P2902
IC2901-1, 2, 17 REC
8.0Vp-p (2msec./div)
N. SW 5V
22K
22K
IC2505
REG 5V

INPUT		OUTPUT			
6PIN	7PIN	1PIN	2PIN	3PIN	4PIN
L	L	Z	Z	Z	H
L	H	Z	Z	H	Z
H	L	Z	H	Z	Z
H	H	H	Z	Z	Z

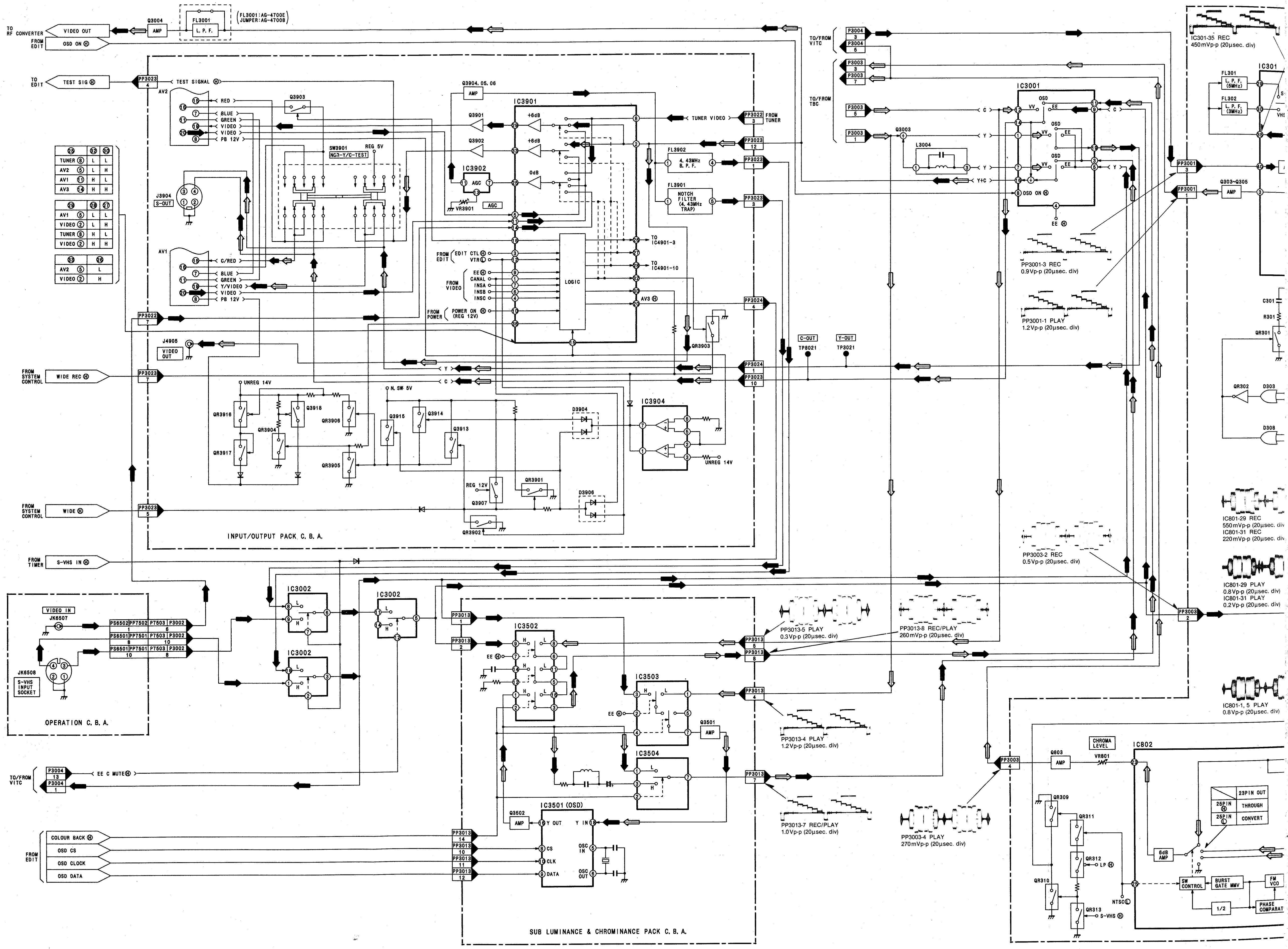
NOTE:Z MEENS HIGH-IMPEDANCE

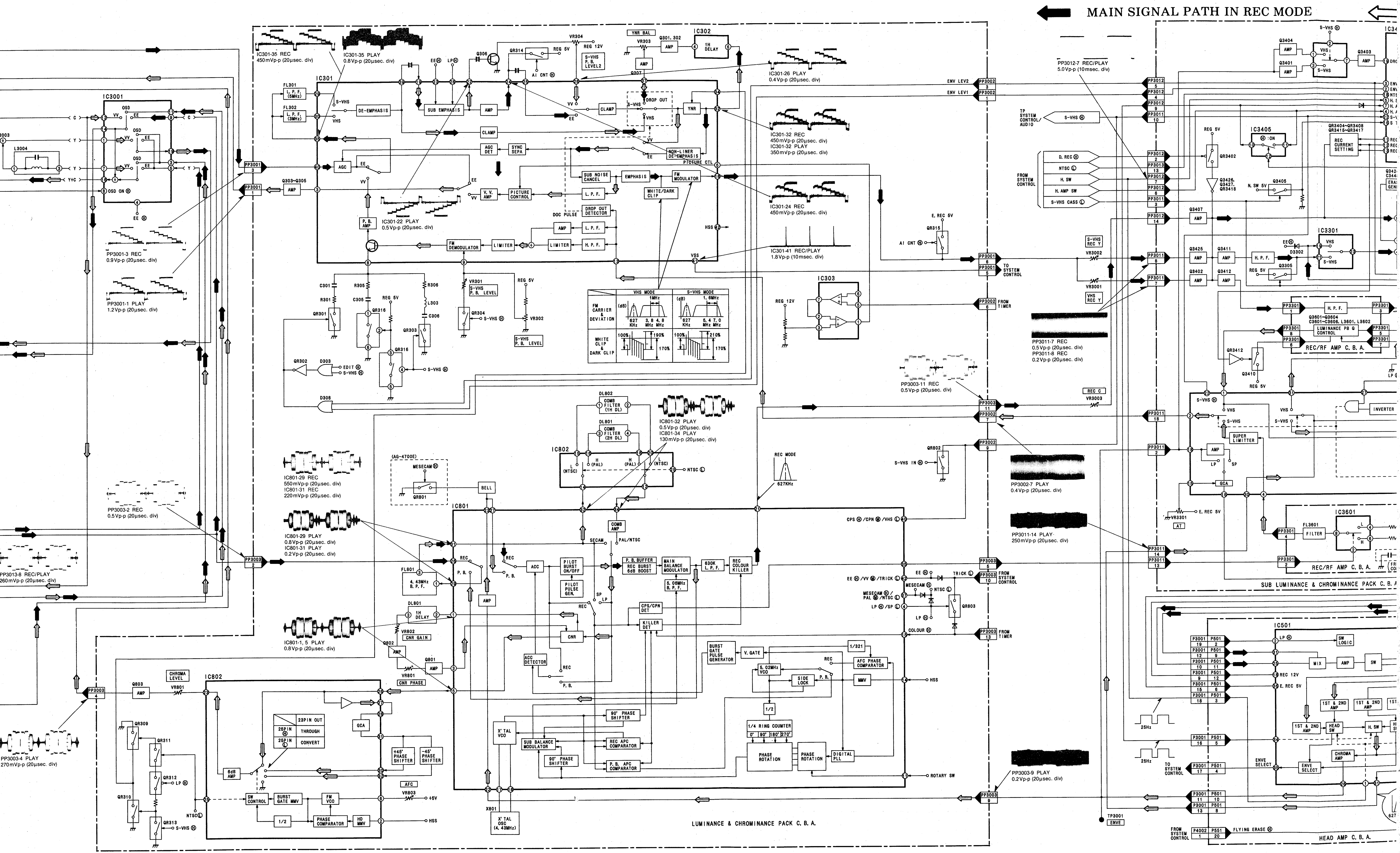

L/SERVO IC
ROTARY SW
ARTIFICIAL. V
TRICK PLAY Ⓛ
FLY ERASE Ⓗ
VIDEO E-E Ⓛ
D REC Ⓗ
VIDEO Ⓗ
VITC CLOCK
VITC DATA IN
VITC DATA OUT
INSERT Ⓗ
D FM REC Ⓗ
N. A. MUTE Ⓗ
FULL ERASE Ⓗ
CUE/REV Ⓗ
D. A. REC Ⓗ
A. DUB Ⓗ
A. MODE SEL
NORMAL REC Ⓛ
FM MUTE Ⓗ
RESET Ⓛ
SERIAL CLK
SERIAL DATA IN
SERIAL DATA OUT
L CH
R CH
POWER OFF Ⓗ
AI LED ON Ⓗ
EDIT TRIG Ⓛ
PREROLL Ⓗ
POSITION SW 3
POSITION SW 2
POSITION SW 1
TAKE UP PHOTO
SUPPLY PHOTO
TAPE SENSOR LED
S. REEL PULSE
T. REEL PULSE
LOADING Ⓗ
UN LOADING Ⓗ
S. TAB Ⓛ
CTL HEAD (−)
CTL HEAD (+)
DEW DT Ⓗ
REG 2.5V
IC6001-63 REC
5.0Vp-p (10msec./div)
IC6001-37 REC
4.0Vp-p (50nsec./div)
IC6001-38 REC
2.4Vp-p (50nsec./div)
IC6001-61 STILL
0.6Vp-p (10msec./div)
IC6001-72, 73 REC
0.8Vp-p (1msec./div)
IC6001-67 REC
2.0Vp-p (10msec./div)
IC6001-50 PLAY
5.0Vp-p (10msec./div)
IC6001-62 REC
5.0Vp-p (10msec./div)
IC6001-53 REC
5.0Vp-p (2msec./div)
IC6001-52 REC
5.0Vp-p (10msec./div)
IC6001-89 PLAY
3.6Vp-p (10msec./div)
IC6001-74 REC
5.0Vp-p (10msec./div)
IC6001-70, 71 REC
7.0Vp-p (1sec./div)
IC6001-82, 83 REC
6.0Vp-p (10msec./div)
ROTARY SW
ARTIFICIAL. V
TRICK Ⓛ
FLY ERASE Ⓗ
VIDEO E-E Ⓛ
S TAB 12V
V. D. REC Ⓗ
TO VIDEO
PP4701
8
12
QR4708
REG 12V
VIDEO Ⓗ
TO I/O
P3004
8
9
10
VITC CLOCK
VITC DATA IN
VITC DATA OUT
TO/FROM VITC
INSERT Ⓛ
TO AUDIO
QR6009
D FM REC Ⓗ
TRICK Ⓛ
N. AUDIO MUTE Ⓗ
FULL ERASE Ⓗ
CUE/REV
D. A. REC Ⓗ
AUDIO DUB Ⓗ
AUDIO MODE SEL
NORMAL REC Ⓛ
FM MUTE Ⓗ
TO AUDIO
EDIT TRIGER Ⓛ
RESET Ⓛ
SERIAL CLOCK
SERIAL DATA
TO/FROM EDIT
IC6003
RESET
N. SW 5V
QR6004
P6003
3
2
TO OPERATION
QR6003
QR6002
QR4004
POWER OFF Ⓗ
TO HI-FI AUDIO
QR1001
POWER OFF Ⓛ
TO POWER
L CH Ⓛ
R CH Ⓛ
FROM HI-FI AUDIO
N. SW 5V
N. SW 5V
UNREG 14V
Q6001
Q6002
IC2501
LOADING MOTOR DRIVE
PP2001
3
4
2
1
UNREG 14V
P4001
5
6
CTL HEAD
IC2501-2, 10
(V)
IC2501-4 (V)
TO AUDIO /VIDEO
S-VHS CASSETTE Ⓛ
REG 12V
QR6013
PP6001
VHS CASSETTE Ⓛ
T. PHOTO
GND
POSW 2
POSW 1
POSW 3
S. PHOTO
SNS LED
S. REEL
REEL +B
T. REEL
LOADING M (+)
LOADING M (−)
S. TAB Ⓛ
REG 5V
N. SW 5V
C6030 (BACK UP)
P7401
P7501
19
2
BACK UP 5V
IC7502
RESET
TAPE IN
TIMER REC
STAND BY
OPERATE
P7506
3
4
5
6
N. SW 5V
QR7512
QR7513
QR7514
IC7504
RESET
QR7507
IC7503 (EPROM)
RST
CLK
DATA IN
DATA OUT
CS Ⓛ
SERIAL CLOCK
SERIAL DATA
S-VHS Ⓗ
(AG-4700B)
MONO2 Ⓛ
D7558
MONO1 Ⓛ
D7559
BILING Ⓛ
TO TIMER DISPLAY
FROM DECODER
R CH Ⓗ
L CH Ⓗ
LEVEL METER 5V
STEREO Ⓛ
D7560
FROM DECODER
P7402
P7502
REG 12V
Q6008
QR7506
D7557
QR7501
D7556
Q7502
IC7501 TIMER IC
RESET Ⓛ
VDD
TAPE IN Ⓛ
TIMER SET Ⓛ
CLK
DATA OUT
DATA IN
CS Ⓛ
POWER FAIL
SERIAL CLOCK
SERIAL DATA
SERIAL DATA
DP7501
GRID 0
GRID 9
GRID SIGNALS
SEG 15
SEG 0
SEGMENT SIGNALS
P30
P31
P32
P33
P34
P35
P36
P37
P00
P01
METER ON Ⓛ
P20
P21
P22
P23
IR
X0
X1
OSC 1
OSC 2
P24
P25
JOG 1
JOG 2
P26
P02
STOP
EJECT
PAUSE/STILL
POWER
PAL/MESECAM
(AG-4700E)
PLAYER
RECODER
ENTER
ESCAPE
(AG-4700E)
CH DOWN/(−)
CH UP/(+)
PROG/CHECK
EDIT MENU
EDIT(−)
EDIT(−)
IC7501-38
IC7501-39
IC7501-40
IC7501-41
IC7501-42
IC7501-43
IC7501-44
IC7501-45
IC7501-46
IC7501-47
IR6501
IR RECEIVER
32KHz (BACK UP)
X7502
TIMER OSC
C7501
X7501
4.19MHz
IC7501-6 STOP
5.0Vp-p (10μsec./div)
IC7501-5 STOP
2.2Vp-p (5μsec./div)
IC7501-2 STOP
2.0Vp-p (0.1μsec./div)
SW1502
S-VHS CASSETTE SW
TAKE UP PHOTO TR
Q1501
SUPPLY PHOTO TR
Q1502
D1501
SENSOR LED
P1505
IC1501
T. REEL SNS
IC1502
S. REEL SNS
SW1501
SAFETY TAB SW
MECHANISM CONNECTION
P1503
P1508
LOADING MOTOR
MODE SW
P1504
POSITION SW
<TIMING CHART>
SW 1
SW 2
SW 3
POSITION NO.
0
7
1
7
3
7
2
MODE
EJECT
CASSETTE DOWN
MID
REV

INPUT		OUTPUT		MODE
PIN5	PIN6	PIN2	PIN10	
L	L	OPEN	OPEN	STOP
H	L	H	L	FORWARD
L	H	L	H	REWIND
H	H	L	L	BRAKE


IC7501 TIMER IC
IC7502
RESET
IC7503 (EPROM)
IC7504
RESET
IC7505
IR6501
IR RECEIVER
DP7501
TIMER DISPLAY
T1701
Q1701
UNREG 14V
GRID SIGNALS
SEGMENT SIGNALS
SEGMENT SIGNAL
GRID SIGNAL
OPERATION
STOP
EJECT
REW
FF
PAUSE/STILL
POWER
PLAY
PAL/MESECAM
(AG-4700E)
REC
AUDIO OUT
PLAYER
RECODER
MARK IN
MARK OUT
ENTER
ESCAPE
PROG CLEAR
RESET
AV LINK
TIMER REC
CH DOWN/(−)
CH UP/(+)
SP/LP (NEXT)
SLEEP/(SHIFT)
PROG/CHECK
EDIT MENU
CLOCK SET
EDIT (−)
TUNER PRESET
IC7501-6 STOP
5.0Vp-p (10µsec./div)
IC7501-5 STOP
2.2Vp-p (5µsec./div)
IC7501-2 STOP
2.0Vp-p (0.1µsec./div)
32KHz (BACK UP)
X7502
TIMER OSC
C7501
X7501
4.19MHz
METER ON
POWER FAIL
SERIAL CLOCK
SERIAL DATA
S-VHS
MONO2
MONO1
BILING
TO TIMER DISPLAY
LEVEL METER 5V
STEREO
FROM DECODER
R CH
L CH
N. SW 5V
REG 12V
BACK UP 5V
C6030 (BACK UP)
TAPE IN
TIMER REC
STAND BY
OPERATE
TIMER SET
VDD
CLK
DATA IN
DATA OUT
CS
RST
QR7507
QR7512
QR7513
QR7514
QR7506
QR7501
QR7502
QR7503
QR7508
QR7509
QR7510
QR7511
D7556
D7557
D7558
D7559
D7560
Q7502
Q6008
METER L CH
METER R CH
FROM AUDIO
VR4004
METER ADJ
LEVEL METER 5V
SHUTTLE 1
SHUTTLE 2
SHUTTLE 3
SHUTTLE 4
JOG 1
JOG 2
P7505
SW7503 REMOTE MODE
VTR1
VTR2
VTR3
SW7505 AI PICTURE
OFF
ON
SW7509 WIDE
AUTO
(AG-4700B)
SW7501 MONO
MONO /ON
NICAM /OFF
SW7506 S-VHS
SW7504 HI-FI/NORMAL MIX
SW7510 TBC
SW7502 EDIT MODE
RECORDER
PLAYER
PASSIVE
TO DECODER
TO EDIT
TO TBC
TO AUDIO
TO VIDEO
SW7507 INPUT SELECT
LINE
S-VHS
SW7508 VIDEO MODE
COLOUR
B/W
S CASSETTE
QR6013
PP6001
VHS CASSETTE
T. PHOTO
GND
POSW 2
POSW 1
POSW 3
S. PHOTO
SNS LED
S. REEL
REEL +B
T. REEL
LOADING M (+)
LOADING M (−)
S. TAB
P1505
SW1502 S-VHS CASSETTE SW
TAKE UP PHOTO TR Q1501
SUPPLY PHOTO TR Q1502
D1501 SENSOR LED
IC1501 T. REEL SNS
IC1502 S. REEL SNS
SW1501 SAFETY TAB SW
MECHANISM CONNECTION
P1503
P1508
LOADING MOTOR
MODE SW
P1504
POSITION SW
<TIMING CHART>
SW 1
SW 2
SW 3
POSITION NO.
MODE
EJECT
CASSETTE DOWN
MID
REV
PLAY STOP3
STOP
FFREW

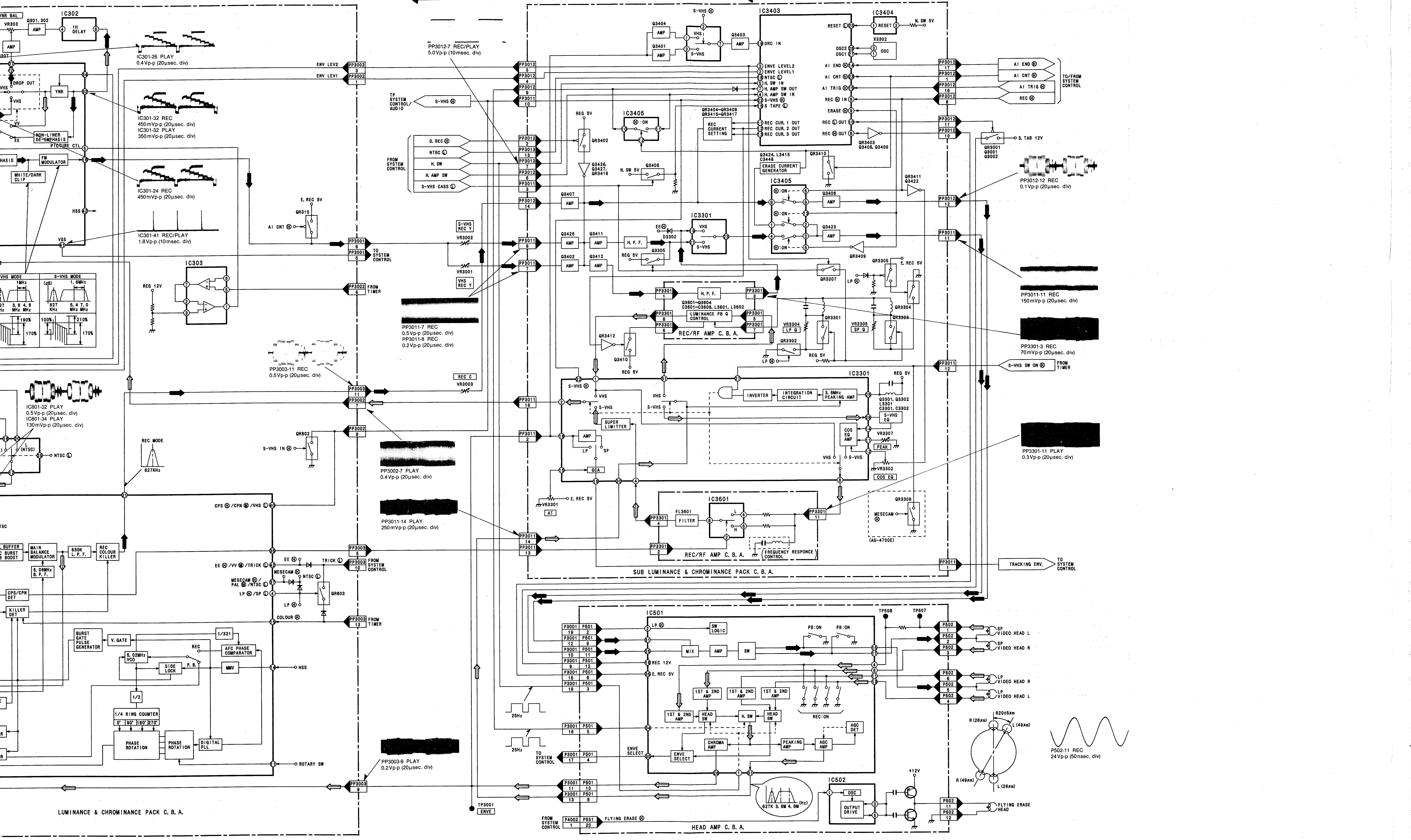
3-5. LUMINANCE & CHROMINANCE BLOCK DIAGRAM


TO RF CONVERTER
VIDEO OUT
FROM EDIT
OSD ON Ⓗ
Q3004
AMP
FL3001
L.P.F.
(FL3001:AG-4700E JUMPER:AG-4700B)
TO EDIT
TEST SIG Ⓗ
PP3023 4
TEST SIGNAL Ⓗ
AV2
RED
BLUE
GREEN
VIDEO
VIDEO
PB 12V
Q3903
SW3901
REG 5V
NOR-Y/C-TEST
J3904
S-OUT
AV1
C/RED
BLUE
GREEN
Y/VIDEO
VIDEO
PB 12V
TUNER ⑧ L L
AV2 ⑤ L H
AV1 ⑪ H L
AV3 ⑭ H H
AV1 ⑤ L L
VIDEO ② L H
TUNER ⑧ H L
VIDEO ② H H
AV2 ⑤ L
VIDEO ② H
PP3022 7
J4905
VIDEO OUT
FROM SYSTEM CONTROL
WIDE REC Ⓗ
PP3023 7
UNREG 14V
N.SW 5V
QR3916
QR3917
QR3904
Q3918
QR3906
QR3905
Q3915
Q3914
Q3913
REG 12V
Q3907
QR3901
QR3902
D3904
D3906
IC3904
UNREG 14V
FROM SYSTEM CONTROL
WIDE Ⓗ
PP3023 5
INPUT/OUTPUT PACK C.B.A.
Q3904, 05, 06
AMP
IC3901
Q3901
Q3902
+6dB
+6dB
0dB
IC3902
AGC
VR3901
AGC
FROM EDIT
EDIT CTL Ⓗ
VTR Ⓗ
FROM VIDEO
EE Ⓗ
CANAL
INSA
INSB
INSC
FROM POWER
POWER ON Ⓗ (REG 12V)
LOGIC
TO IC4901-3
TO IC4901-10
AV3 Ⓗ
QR3903
TUNER VIDEO
PP3022 3
FROM TUNER
PP3023 12
FL3902
4.43MHz B.P.F.
PP3023 1
FL3901
NOTCH FILTER (4.43MHz TRAP)
PP3023 3
PP3024 4
C-OUT
TP8021
Y-OUT
TP3021
PP3024 1
PP3023 10
Y
C
TO/FROM VITC
P3004 3
P3004 6
TO/FROM TBC
P3003 3
P3003 7
P3003 5
P3003 1
Q3003
L3004
IC3001
OSD
EE
VV
OSD ON Ⓗ
EE Ⓗ
Y+C
PP3001 3
PP3001 1
Q303-Q305
AMP
IC301-35 REC
450mVp-p (20μsec. div)
FL301
L.P.F. (5MHz)
FL302
L.P.F. (3MHz)
IC301
PP3001-3 REC
0.9Vp-p (20μsec. div)
PP3001-1 PLAY
1.2Vp-p (20μsec. div)
C301
R301
QR301
QR302
D303
D308
IC801-29 REC
550mVp-p (20μsec. div)
IC801-31 REC
220mVp-p (20μsec. div)
IC801-29 PLAY
0.8Vp-p (20μsec. div)
IC801-31 PLAY
0.2Vp-p (20μsec. div)
IC801-1, 5 PLAY
0.8Vp-p (20μsec. div)
PP3003-2 REC
0.5Vp-p (20μsec. div)
PP3003 2
FROM TIMER
S-VHS IN Ⓗ
IC3002
VIDEO IN
JK6507
PS6502 PP7502 P7503 P3002 1 6
PS6501 PP7501 P7503 P3002 8 10
PS6501 PP7501 P7503 P3002 10 8
JK6508
S-VHS INPUT SOCKET
OPERATION C.B.A.
TO/FROM VITC
P3004 13
P3004 1
EE C MUTE Ⓗ
PP3013 1
PP3013 2
IC3502
EE Ⓗ
IC3503
IC3504
Q3501
AMP
PP3013 5
PP3013 8
PP3013 4
PP3013 7
PP3013-5 PLAY
0.3Vp-p (20μsec. div)
PP3013-8 REC/PLAY
260mVp-p (20μsec. div)
PP3013-4 PLAY
1.2Vp-p (20μsec. div)
PP3013-7 REC/PLAY
1.0Vp-p (20μsec. div)
PP3003-4 PLAY
270mVp-p (20μsec. div)
PP3003 4
IC3501 (OSD)
Q3502
AMP
Y OUT
Y IN
CS
CLK
DATA
OSC IN
OSC OUT
FROM EDIT
COLOUR BACK Ⓗ
OSD CS
OSD CLOCK
OSD DATA
PP3013 14
PP3013 10
PP3013 11
PP3013 12
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
Q803
AMP
CHROMA LEVEL
VR801
IC802
QR309
QR311
QR312
LP Ⓗ
QR310
QR313
NTSC Ⓛ
S-VHS Ⓗ
23PIN OUT
25PIN Ⓗ THROUGH
25PIN Ⓛ CONVERT
6dB AMP
SW CONTROL
BURST GATE MMV
FM VCO
1/2
PHASE COMPARAT


MAIN SIGNAL PATH IN REC MODE
IC3001
OSD
EE
L3004
Y+C
OSD ON Ⓗ
PP3001-3 REC
0.9Vp-p (20μsec. div)
PP3001-1 PLAY
1.2Vp-p (20μsec. div)
PP3003-2 REC
0.5Vp-p (20μsec. div)
PP3013-8 REC/PLAY
260mVp-p (20μsec. div)
PP3003-4 PLAY
270mVp-p (20μsec. div)
IC301-35 REC
450mVp-p (20μsec. div)
IC301-35 PLAY
0.8Vp-p (20μsec. div)
IC301
FL301
L. P. F. (6MHz)
FL302
L. P. F. (3MHz)
S-VHS
VHS
DE-EMPHASIS
SUB EMPHASIS
AMP
CLAMP
AGC
AGC DET
SYNC SEPA
V. V. AMP
PICTURE CONTROL
P. B. AMP
IC301-22 PLAY
0.5Vp-p (20μsec. div)
FM DEMODULATOR
LIMITER
H. P. F.
L. P. F.
SUB NOISE CANCEL
EMPHASIS
FM MODULATOR
WHITE/DARK CLIP
DROP OUT DETECTOR
DOC PULSE
NON-LINER DE-EMPHASIS
PICTURE CTL
YNR
DROP OUT
YNR BAL
VR303
VR304
REG 12V
REG 5V
S-VHS P. B. LEVEL2
Q301, 302
IC302
1H DELAY
Q306
QR314
AI CNT Ⓗ
Q307
Q303~Q305
PP3001
IC301-26 PLAY
0.4Vp-p (20μsec. div)
IC301-32 REC
450mVp-p (20μsec. div)
IC301-32 PLAY
350mVp-p (20μsec. div)
IC301-24 REC
450mVp-p (20μsec. div)
IC301-41 REC/PLAY
1.8Vp-p (10msec. div)
HSS
VSS
VR301
S-VHS P. B. LEVEL
VR302
QR301
QR302
QR303
QR304
QR316
D303
D308
EDIT Ⓗ
S-VHS Ⓗ
VHS MODE
S-VHS MODE
FM CARRIER & DEVIATION
627 KHz
3.8 4.8 MHz MHz
1MHz
5.4 7.0 MHz MHz
1.6MHz
WHITE CLIP & DARK CLIP
100%
190%
210%
170%
IC303
REG 12V
E. REC 5V
QR315
AI CNT Ⓗ
ENV LEV2
ENV LEV1
PP3002
TO SYSTEM CONTROL
FROM TIMER
PP3003-11 REC
0.5Vp-p (20μsec. div)
PP3002-7 PLAY
0.4Vp-p (20μsec. div)
PP3011-14 PLAY
250mVp-p (20μsec. div)
PP3003-9 PLAY
0.2Vp-p (20μsec. div)
DL802
COMB FILTER (1H DL)
DL801
COMB FILTER (2H DL)
IC802
(NTSC)
(PAL)
NTSC Ⓛ
IC801-32 PLAY
0.5Vp-p (20μsec. div)
IC801-34 PLAY
130mVp-p (20μsec. div)
IC801-29 REC
550mVp-p (20μsec. div)
IC801-31 REC
220mVp-p (20μsec. div)
IC801-29 PLAY
0.8Vp-p (20μsec. div)
IC801-31 PLAY
0.2Vp-p (20μsec. div)
IC801-1, 5 PLAY
0.8Vp-p (20μsec. div)
(AG-4700E)
MESECAM Ⓗ
QR801
BELL
IC801
SECAM
PAL/NTSC
COMB AMP
REC MODE
627KHz
FL801
4.43MHz B. P. F.
ACC
PILOT BURST ON/OFF
PILOT PULSE GEN.
P. B. BUFFER REC BURST 6dB BOOST
MAIN BALANCE MODULATOR
630K L. P. F.
REC COLOUR KILLER
5.06MHz B. P. F.
CPS/CPN DET
KILLER DET
CNR
ACC DETECTOR
BURST GATE PULSE GENERATOR
V. GATE
1/321
AFC PHASE COMPARATOR
5.02MHz VCO
SIDE LOCK
MMV
1/2
1/4 RING COUNTER
0° 90° 180° 270°
PHASE ROTATION
DIGITAL PLL
90° PHASE SHIFTER
REC APC COMPARATOR
P. B. APC COMPARATOR
SUB BALANCE MODULATOR
X'TAL VCO
X801
X'TAL OSC (4.43MHz)
CPS Ⓗ/CPN Ⓜ/VHS Ⓛ
EE Ⓗ/VV Ⓜ/TRICK Ⓛ
MESECAM Ⓗ/PAL Ⓜ/NTSC Ⓛ
LP Ⓗ/SP Ⓛ
COLOUR Ⓗ
ROTARY SW
QR803
DL801
1H DELAY
VR802
CNR GAIN
Q802
Q801
VR801
CNR PHASE
CHROMA LEVEL
Q803
IC802
GCA
23PIN OUT
25PIN Ⓗ THROUGH
25PIN Ⓛ CONVERT
+45° PHASE SHIFTER
-45° PHASE SHIFTER
6dB AMP
SW CONTROL
BURST GATE MMV
FM VCO
1/2
PHASE COMPARATOR
HD MMV
AFC
VR803
+5V
HSS
QR309
QR310
QR311
QR312
QR313
LP Ⓗ
S-VHS Ⓗ
NTSCⓁ
LUMINANCE & CHROMINANCE PACK C. B. A.
PP3012-7 REC/PLAY
5.0Vp-p (10msec. div)
TP SYSTEM CONTROL/ AUDIO
S-VHS Ⓗ
D. REC Ⓗ
NTSC Ⓛ
H. SW
H. AMP SW
S-VHS CASS Ⓛ
FROM SYSTEM CONTROL
PP3012
PP3011
PP3013
REG 5V
QR3402
IC3405
Ⓗ: ON
Q3426, Q3427, QR3418
N. SW 5V
Q3405
QR3404~QR3408 QR3415~QR3417
REC CURRENT SETTING
Q3404
Q3401
Q3403
Q3407
S-VHS REC Y
VR3002
VR3001
VHS REC Y
Q3425
Q3411
Q3402
Q3412
IC3301
H. P. F.
D3302
Q3305
PP3011-7 REC
0.5Vp-p (20μsec. div)
PP3011-8 REC
0.2Vp-p (20μsec. div)
PP3301
Q3601~Q3604
C3601~C3606, L3601, L3602
LUMINANCE PB Q CONTROL
REC/RF AMP C. B. A.
QR3412
Q3410
REC C
VR3003
QR802
S-VHS IN Ⓗ
INVERTER
SUPER LIMITTER
GCA
VR3301
AT
E. REC 5V
IC3601
FL3601
FILTER
SUB LUMINANCE & CHROMINANCE PACK C. B. A.
IC501
P3001
P501
LP Ⓗ
SW LOGIC
MIX
REC 12V
E. REC 5V
1ST & 2ND AMP
HEAD SW
H. SW
CHROMA AMP
ENVE SELECT
25Hz
TO SYSTEM CONTROL
TP3001
ENVE
FROM SYSTEM CONTROL
P4002
P551
FLYING ERASE Ⓗ
HEAD AMP C. B. A.

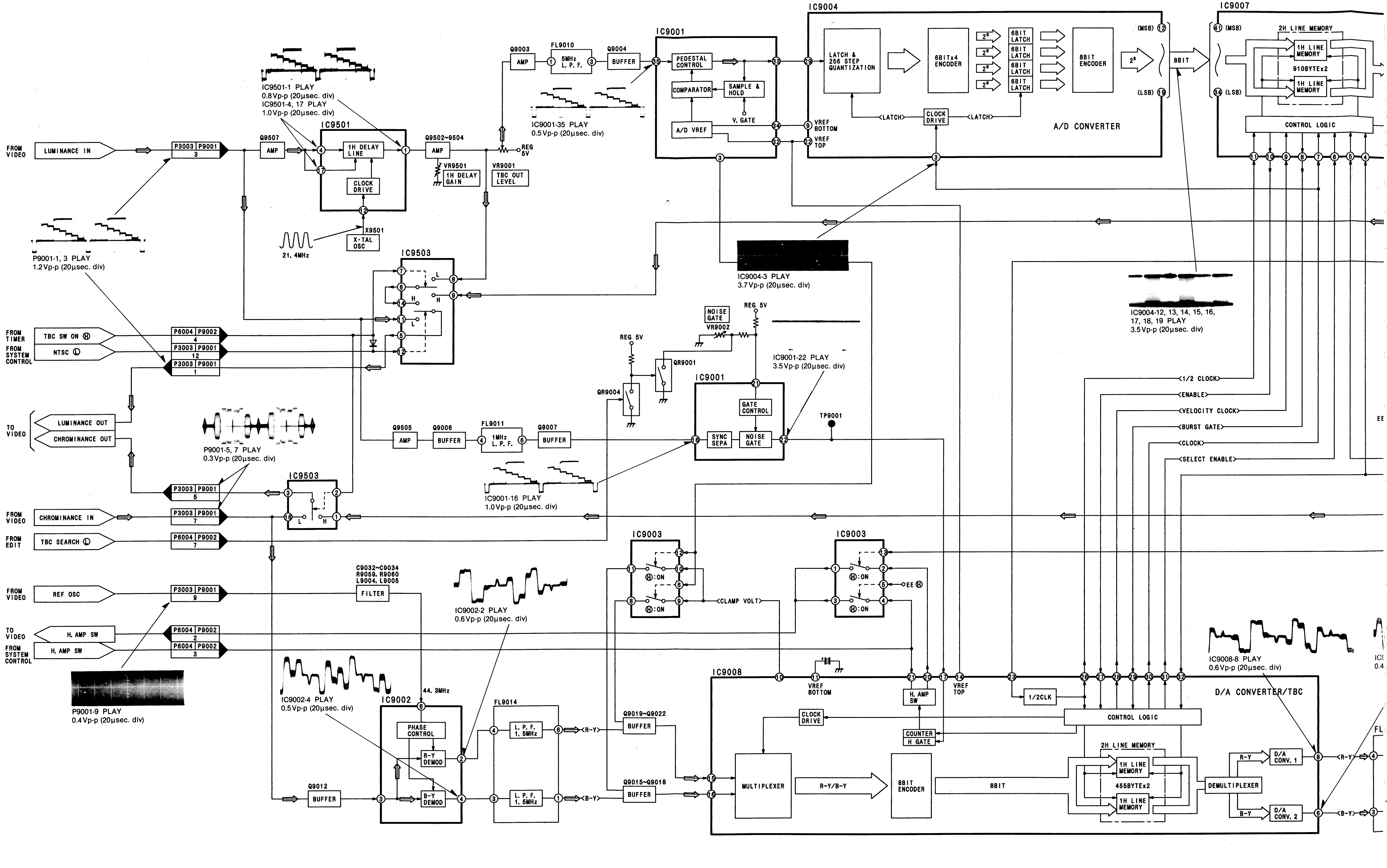
MAIN SIGNAL PATH IN REC MODE

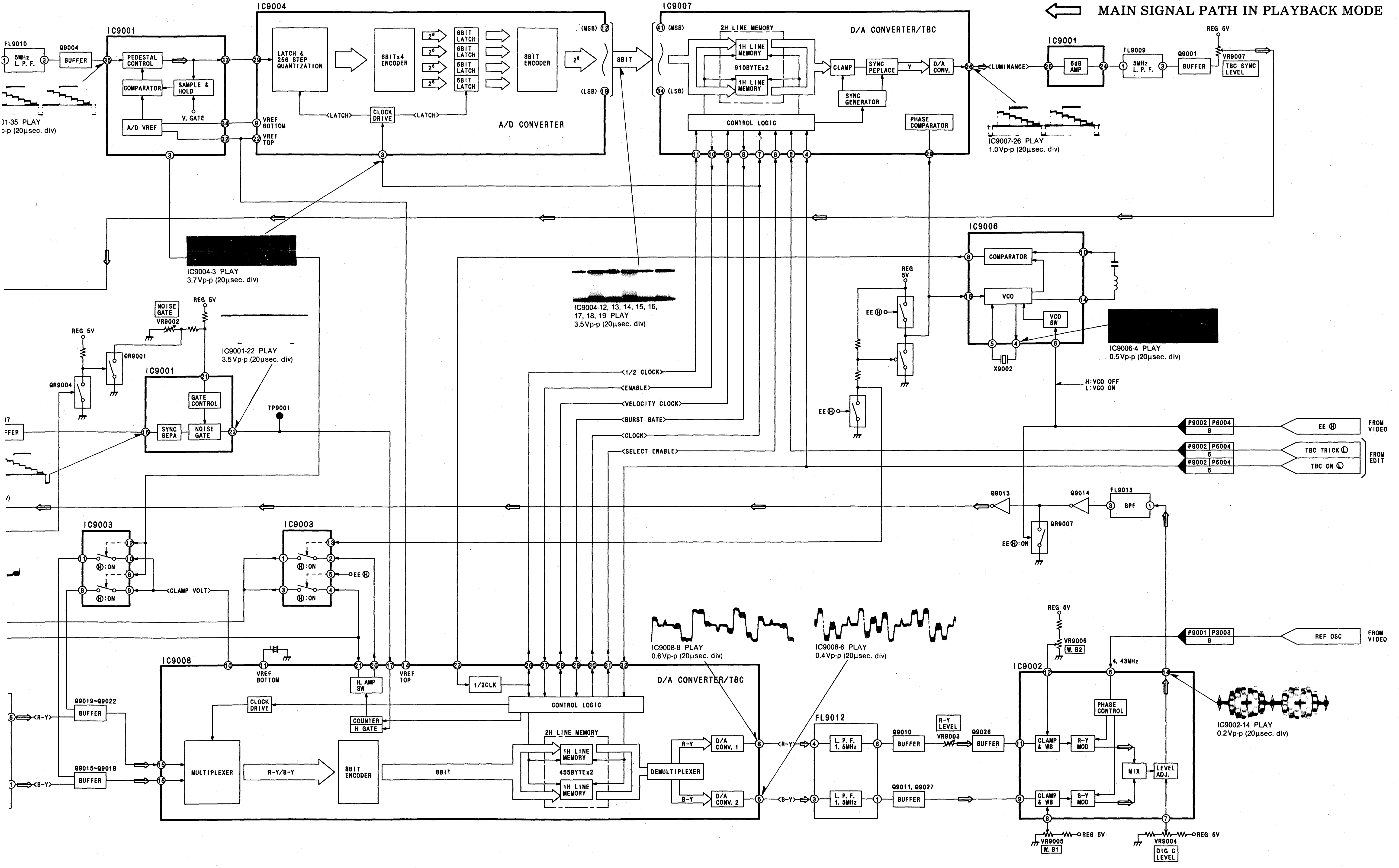
MAIN SIGNAL PATH IN PLAYBACK MODE



IC302
1H DELAY
Q301, 302
AMP
VR303
YNR
DROP OUT
NON-LINER DE-EMPHASIS
PICTURE CTL
FM MODULATOR
WHITE/DARK CLIP
HSS
VSS
IC301-26 PLAY
0.4Vp-p (20μsec. div)
IC301-32 REC
450mVp-p (20μsec. div)
IC301-32 PLAY
350mVp-p (20μsec. div)
IC301-24 REC
450mVp-p (20μsec. div)
IC301-41 REC/PLAY
1.8Vp-p (10msec. div)
ENV LEV2
ENV LEV1
PP3002
PP3001
TO SYSTEM CONTROL
E. REC 5V
QR315
AI CNT Ⓗ
IC303
REG 12V
FROM TIMER
VHS MODE
S-VHS MODE
PP3003-11 REC
0.5Vp-p (20μsec. div)
IC801-32 PLAY
0.5Vp-p (20μsec. div)
IC801-34 PLAY
130mVp-p (20μsec. div)
REC MODE
627KHz
NTSC Ⓛ
QR802
S-VHS IN Ⓗ
PP3002-7 PLAY
0.4Vp-p (20μsec. div)
PP3011-14 PLAY
250mVp-p (20μsec. div)
CPS Ⓗ /CPN Ⓜ /VHS Ⓛ
BUFFER
MAIN BALANCE MODULATOR
630K L. P. F.
REC COLOUR KILLER
5. 06MHz B. P. F.
EE Ⓗ /VV Ⓜ /TRICK Ⓛ
MESECAM Ⓗ / PAL Ⓜ /NTSC Ⓛ
LP Ⓗ /SP Ⓛ
QR803
TRICK Ⓛ
COLOUR Ⓗ
CPS/CPN DET
KILLER DET
BURST GATE PULSE GENERATOR
V. GATE
1/321
AFC PHASE COMPARATOR
5. 02MHz VCO
SIDE LOCK
MMV
HSS
1/2
1/4 RING COUNTER
PHASE ROTATION
DIGITAL PLL
ROTARY SW
PP3003-9 PLAY
0.2Vp-p (20μsec. div)
LUMINANCE & CHROMINANCE PACK C. B. A.
PP3012-7 REC/PLAY
5.0Vp-p (10msec. div)
TP SYSTEM CONTROL/ AUDIO
S-VHS Ⓗ
FROM SYSTEM CONTROL
D. REC Ⓗ
NTSC Ⓛ
H. SW
H. AMP SW
S-VHS CASS Ⓛ
PP3012
PP3013
PP3011
S-VHS REC Y
VR3002
VR3001
VHS REC Y
PP3011-7 REC
0.5Vp-p (20μsec. div)
PP3011-8 REC
0.2Vp-p (20μsec. div)
REC C
VR3003
Q3404
Q3401
Q3403
IC3403
DRC IN
ENVE LEVEL2
ENVE LEVEL1
H. SW IN
H. AMP SW OUT
H. AMP SW IN
S TAPE Ⓛ
REC CUR. 1 OUT
REC CUR. 2 OUT
REC CUR. 3 OUT
REC CURRENT SETTING
QR3404~QR3408
QR3415~QR3417
IC3404
RESET
X3302
OSC
AI END Ⓗ
AI CNT Ⓗ
AI TRIG Ⓗ
REC Ⓗ IN
ERASE Ⓗ
REC Ⓛ OUT
REC Ⓗ OUT
TO/FROM SYSTEM CONTROL
QR3403
Q3408, Q3409
S. TAB 12V
QR3001
Q3001
Q3002
PP3012-12 REC
0.1Vp-p (20μsec. div)
IC3405
REG 5V
QR3402
Q3426, Q3427, QR3418
N. SW 5V
Q3405
Q3424, L3415
C3448
ERASE CURRENT GENERATOR
QR3410
QR3411
Q3422
Q3407
Q3406
Q3423
Q3425
Q3411
Q3402
Q3412
H. P. F.
D3302
Q3305
IC3301
QR3409
QR3307
QR3305
LP Ⓗ
QR3304
QR3303
QR3301
VR3304
LP Q
VR3305
SP Q
QR3302
Q3601~Q3604
C3601~C3606, L3601, L3602
LUMINANCE PB Q CONTROL
REC/RF AMP C. B. A.
QR3412
Q3410
PP3301
PP3011-11 REC
150mVp-p (20μsec. div)
PP3301-3 REC
70mVp-p (20μsec. div)
S-VHS SW ON Ⓗ
INVERTER
INTEGRATION CIRCUIT
3. 8MHz PEAKING AMP
Q3301, Q3302
L3301
C3301, C3302
S-VHS EQ
SUPER LIMITTER
COS EQ AMP
VR3307
PEAK
VR3302
COS EQ
GCA
VR3301
AT
E. REC 5V
PP3301-11 PLAY
0.3Vp-p (20μsec. div)
IC3601
FL3601
FILTER
FREQUENCY RESPONCE CONTROL
QR3308
MESECAM Ⓗ
(AG-4700E)
SUB LUMINANCE & CHROMINANCE PACK C. B. A.
TRACKING ENV.
IC501
TP508
TP507
SW LOGIC
PB:ON
MIX
AMP
SW
REC 12V
E. REC 5V
1ST & 2ND AMP
HEAD SW
H. SW
REC:ON
AGC DET
CHROMA AMP
PEAKING AMP
AGC AMP
ENVE SELECT
P3001
P501
P502
SP VIDEO HEAD L
SP VIDEO HEAD R
LP VIDEO HEAD R
LP VIDEO HEAD L
25Hz
TP3001 ENVE
627K 3. 8M 4. 8M (Hz)
IC502
OSC
OUTPUT DRIVE
+12V
FLYING ERASE HEAD
FLYING ERASE Ⓗ
P4002
P551
HEAD AMP C. B. A.
R (26μm)
620±5μm
L (49μm)
R (49μm)
L (26μm)
P502-11 REC
24Vp-p (50nsec. div)

3-6. TBC BLOCK DIAGRAM

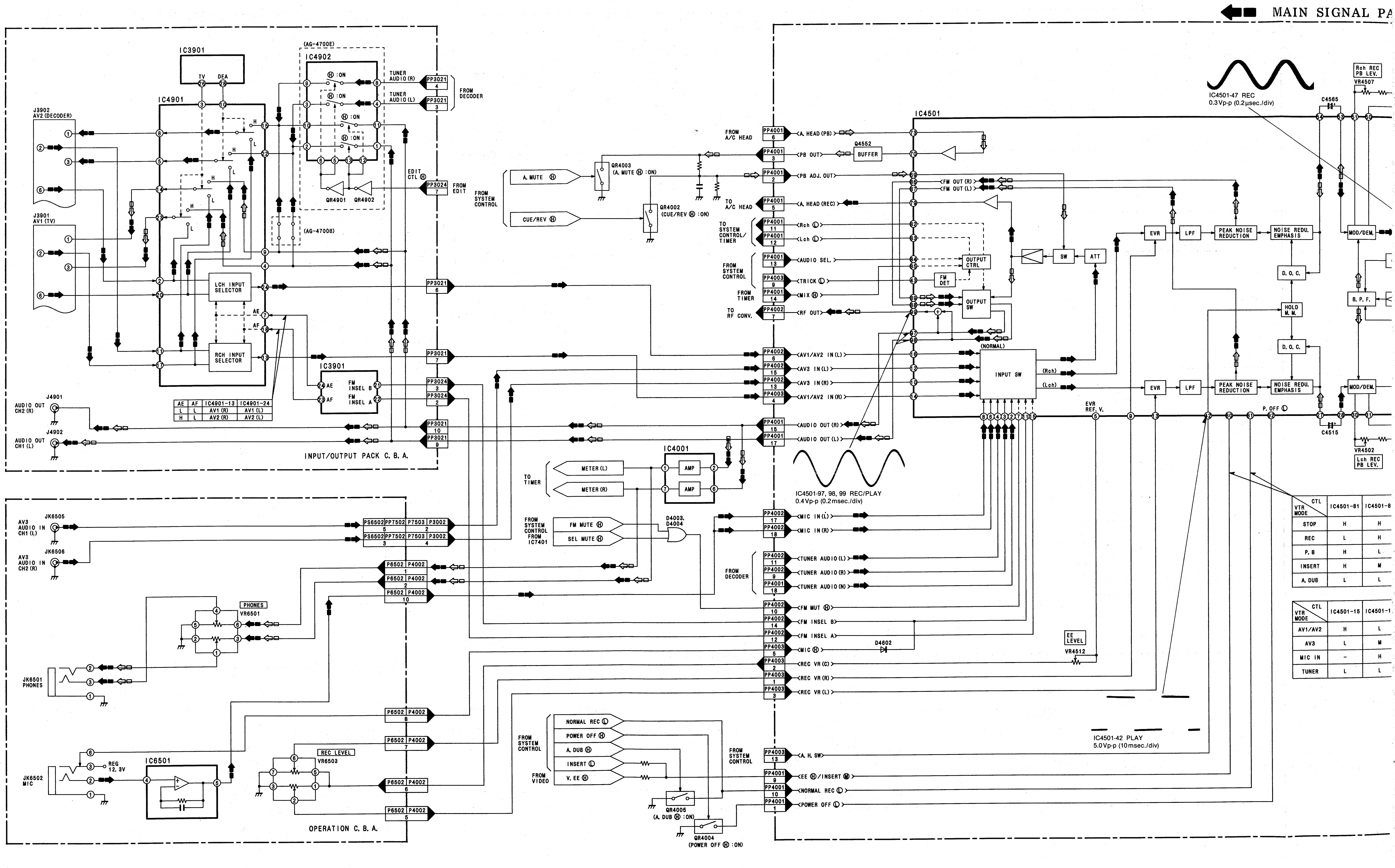

IC9501-1 PLAY
0.8Vp-p (20µsec. div)
IC9501-4, 17 PLAY
1.0Vp-p (20µsec. div)
IC9501
1H DELAY LINE
CLOCK DRIVE
X9501
X-TAL OSC
21. 4MHz
Q9507
AMP
Q9502~9504
AMP
VR9501
1H DELAY GAIN
VR9001
TBC OUT LEVEL
REG 5V
Q9003
AMP
FL9010
5MHz L. P. F.
Q9004
BUFFER
IC9001-35 PLAY
0.5Vp-p (20µsec. div)
IC9001
PEDESTAL CONTROL
COMPARATOR
SAMPLE & HOLD
V. GATE
A/D VREF
IC9004
LATCH & 256 STEP QUANTIZATION
6BITx4 ENCODER
6BIT LATCH
8BIT ENCODER
(MSB)
(LSB)
8BIT
VREF BOTTOM
VREF TOP
CLOCK DRIVE
LATCH
A/D CONVERTER
IC9007
(MSB)
(LSB)
2H LINE MEMORY
1H LINE MEMORY
910BYTEx2
CONTROL LOGIC
FROM VIDEO
LUMINANCE IN
P3003 P9001
P9001-1, 3 PLAY
1.2Vp-p (20µsec. div)
IC9503
IC9004-3 PLAY
3.7Vp-p (20µsec. div)
IC9004-12, 13, 14, 15, 16, 17, 18, 19 PLAY
3.5Vp-p (20µsec. div)
FROM TIMER
TBC SW ON Ⓗ
FROM SYSTEM CONTROL
NTSC Ⓛ
P6004 P9002
NOISE GATE
VR9002
REG 5V
QR9001
QR9004
IC9001-22 PLAY
3.5Vp-p (20µsec. div)
GATE CONTROL
SYNC SEPA
NOISE GATE
TP9001
<1/2 CLOCK>
<ENABLE>
<VELOCITY CLOCK>
<BURST GATE>
<CLOCK>
<SELECT ENABLE>
TO VIDEO
LUMINANCE OUT
CHROMINANCE OUT
P9001-5, 7 PLAY
0.3Vp-p (20µsec. div)
Q9505
AMP
Q9006
BUFFER
FL9011
1MHz L. P. F.
Q9007
BUFFER
IC9001-16 PLAY
1.0Vp-p (20µsec. div)
FROM VIDEO
CHROMINANCE IN
FROM EDIT
TBC SEARCH Ⓛ
IC9003
Ⓗ:ON
<CLAMP VOLT>
EE Ⓗ
FROM VIDEO
REF OSC
C9032~C9034
R9059, R9060
L9004, L9005
FILTER
IC9002-2 PLAY
0.6Vp-p (20µsec. div)
TO VIDEO
H. AMP SW
FROM SYSTEM CONTROL
H. AMP SW
P9001-9 PLAY
0.4Vp-p (20µsec. div)
IC9002-4 PLAY
0.5Vp-p (20µsec. div)
IC9002
44. 3MHz
PHASE CONTROL
R-Y DEMOD
B-Y DEMOD
Q9012
BUFFER
FL9014
L. P. F. 1. 5MHz
<R-Y>
<B-Y>
Q9019~Q9022
BUFFER
Q9015~Q9018
BUFFER
IC9008
VREF BOTTOM
VREF TOP
H. AMP SW
CLOCK DRIVE
COUNTER H GATE
1/2CLK
CONTROL LOGIC
MULTIPLEXER
R-Y/B-Y
8BIT ENCODER
8BIT
2H LINE MEMORY
1H LINE MEMORY
455BYTEx2
DEMULTIPLEXER
R-Y
B-Y
D/A CONV. 1
D/A CONV. 2
D/A CONVERTER/TBC
IC9008-8 PLAY
0.6Vp-p (20µsec. div)


MAIN SIGNAL PATH IN PLAYBACK MODE
FL9010
5MHz L. P. F.
Q9004
BUFFER
IC9001
PEDESTAL CONTROL
COMPARATOR
SAMPLE & HOLD
V. GATE
A/D VREF
01-35 PLAY
p-p (20μsec. div)
IC9004
LATCH & 256 STEP QUANTIZATION
6BITx4 ENCODER
6BIT LATCH
8BIT ENCODER
(MSB)
(LSB)
8BIT
<LATCH>
CLOCK DRIVE
A/D CONVERTER
VREF BOTTOM
VREF TOP
IC9004-3 PLAY
3.7Vp-p (20μsec. div)
IC9004-12, 13, 14, 15, 16, 17, 18, 19 PLAY
3.5Vp-p (20μsec. div)
IC9007
2H LINE MEMORY
1H LINE MEMORY
910BYTEx2
D/A CONVERTER/TBC
CLAMP
SYNC PEPLACE
D/A CONV.
SYNC GENERATOR
CONTROL LOGIC
PHASE COMPARATOR
<LUMINANCE>
IC9007-26 PLAY
1.0Vp-p (20μsec. div)
IC9001
6dB AMP
FL9009
5MHz L. P. F.
Q9001
BUFFER
REG 5V
VR9007
TBC SYNC LEVEL
IC9006
COMPARATOR
VCO
VCO SW
X9002
IC9006-4 PLAY
0.5Vp-p (20μsec. div)
H:VCO OFF
L:VCO ON
REG 5V
EE Ⓗ
NOISE GATE
VR9002
QR9001
QR9004
IC9001-22 PLAY
3.5Vp-p (20μsec. div)
GATE CONTROL
SYNC SEPA
NOISE GATE
TP9001
<1/2 CLOCK>
<ENABLE>
<VELOCITY CLOCK>
<BURST GATE>
<CLOCK>
<SELECT ENABLE>
P9002 P6004
EE Ⓗ
FROM VIDEO
TBC TRICK Ⓛ
TBC ON Ⓛ
FROM EDIT
Q9013
Q9014
FL9013
BPF
QR9007
EE Ⓗ:ON
IC9003
Ⓗ:ON
<CLAMP VOLT>
IC9008
VREF BOTTOM
H. AMP SW
VREF TOP
1/2CLK
CLOCK DRIVE
COUNTER H GATE
CONTROL LOGIC
D/A CONVERTER/TBC
Q9019~Q9022
BUFFER
<R-Y>
Q9015~Q9018
<B-Y>
MULTIPLEXER
R-Y/B-Y
8BIT ENCODER
8BIT
2H LINE MEMORY
1H LINE MEMORY
455BYTEx2
DEMULTIPLEXER
D/A CONV. 1
D/A CONV. 2
IC9008-8 PLAY
0.6Vp-p (20μsec. div)
IC9008-6 PLAY
0.4Vp-p (20μsec. div)
FL9012
L. P. F. 1. 5MHz
Q9010
BUFFER
R-Y LEVEL
VR9003
Q9026
Q9011, Q9027
REG 5V
VR9006
W. B2
4. 43MHz
P9001 P3003
REF OSC
IC9002
PHASE CONTROL
CLAMP & WB
R-Y MOD
B-Y MOD
MIX
LEVEL ADJ.
IC9002-14 PLAY
0.2Vp-p (20μsec. div)
VR9005
W. B1
VR9004
DIG C LEVEL

[redacted]

[redacted]

3-7. Hi-Fi AUDIO BLOCK DIAGRAM


MAIN SIGNAL PA
IC3901
TV
DEA
IC4901
IC4902
(AG-4700E)
(AG-4700B)
Ⓗ :ON
TUNER AUDIO (R)
TUNER AUDIO (L)
PP3021
FROM DECODER
J3902 AV2 (DECODER)
J3901 AV1 (TV)
QR4901
QR4902
EDIT CTL Ⓗ
PP3024
FROM EDIT
LCH INPUT SELECTOR
RCH INPUT SELECTOR
AE
AF
FM INSEL B
FM INSEL A
J4901 AUDIO OUT CH2 (R)
J4902 AUDIO OUT CH1 (L)
INPUT/OUTPUT PACK C. B. A.
FROM SYSTEM CONTROL
A. MUTE Ⓗ
CUE/REV Ⓗ
QR4003 (A. MUTE Ⓗ :ON)
QR4002 (CUE/REV Ⓗ :ON)
FROM A/C HEAD
TO A/C HEAD
PP4001
PP4002
PP4003
‹A. HEAD (PB)›
‹PB OUT›
Q4552
BUFFER
‹PB ADJ. OUT›
‹A. HEAD (REC)›
TO SYSTEM CONTROL/ TIMER
‹Rch Ⓛ›
‹Lch Ⓛ›
FROM SYSTEM CONTROL
‹AUDIO SEL.›
FROM TIMER
‹TRICK Ⓛ›
‹MIX Ⓗ›
TO RF CONV.
‹RF OUT›
‹AV1/AV2 IN (L)›
‹AV3 IN (L)›
‹AV3 IN (R)›
‹AV1/AV2 IN (R)›
‹AUDIO OUT (R)›
‹AUDIO OUT (L)›
IC4501
‹FM OUT (R)›
‹FM OUT (L)›
OUTPUT CTRL
FM DET
OUTPUT SW
SW
ATT
INPUT SW
(NORMAL)
(Rch)
(Lch)
EVR
LPF
PEAK NOISE REDUCTION
NOISE REDU. EMPHASIS
D. O. C.
HOLD M. M.
B. P. F.
MOD/DEM.
Rch REC PB LEV.
VR4507
C4565
C4515
VR4502
Lch REC PB LEV.
EVR REF. V.
P. OFF Ⓛ
IC4001
AMP
TO TIMER
METER (L)
METER (R)
FROM SYSTEM CONTROL FROM IC7401
FM MUTE Ⓗ
SEL MUTE Ⓗ
D4003, D4004
‹MIC IN (L)›
‹MIC IN (R)›
FROM DECODER
‹TUNER AUDIO (L)›
‹TUNER AUDIO (R)›
‹TUNER AUDIO (N)›
‹FM MUT Ⓗ›
‹FM INSEL B›
‹FM INSEL A›
D4602
‹MIC Ⓗ›
EE LEVEL
VR4512
‹REC VR (C)›
‹REC VR (R)›
‹REC VR (L)›
AV3 AUDIO IN CH1 (L)
JK6505
AV3 AUDIO IN CH2 (R)
JK6506
PS6502
PP7502
P7503
P3002
P6502
P4002
PHONES
VR6501
JK6501 PHONES
JK6502 MIC
REG 12. 3V
IC6501
REC LEVEL
VR6503
OPERATION C. B. A.
FROM SYSTEM CONTROL
FROM VIDEO
NORMAL REC Ⓛ
POWER OFF Ⓗ
A. DUB Ⓗ
INSERT Ⓛ
V. EE Ⓗ
QR4005 (A. DUB Ⓗ :ON)
QR4004 (POWER OFF Ⓗ :ON)
‹A. H. SW›
‹EE Ⓗ/INSERT Ⓜ›
‹NORMAL REC Ⓛ›
‹POWER OFF Ⓛ›

IC4501-47 REC
0.3Vp-p (0.2μsec./div)

IC4501-97, 98, 99 REC/PLAY
0.4Vp-p (0.2msec./div)

IC4501-42 PLAY
5.0Vp-p (10msec./div)

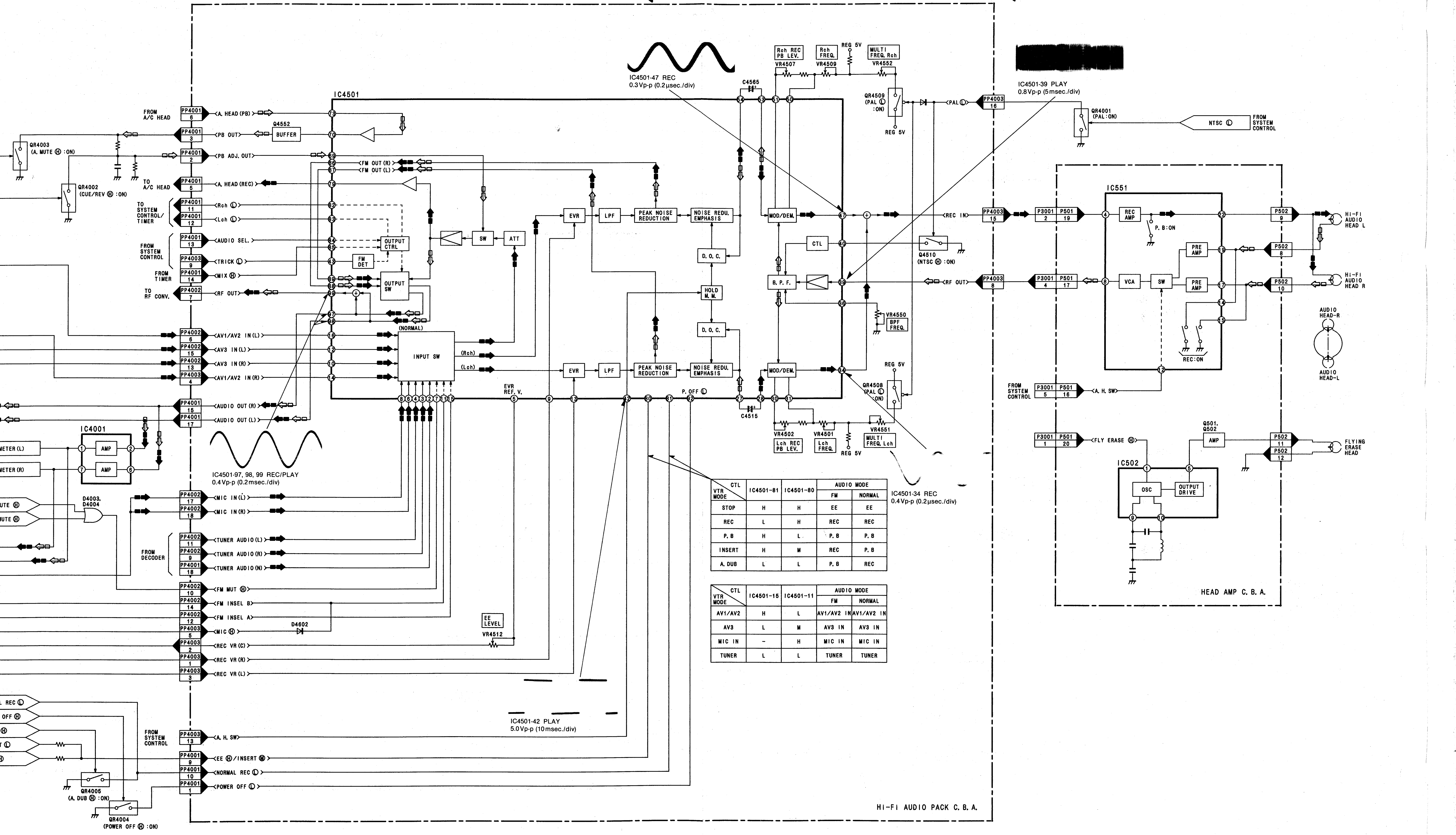
AE	AF	IC4901-13	IC4901-24
L	L	AV1 (R)	AV1 (L)
H	L	AV2 (R)	AV2 (L)

CTL / VTR MODE	IC4501-81	IC4501-8
STOP	H	H
REC	L	H
P. B	H	L
INSERT	H	M
A. DUB	L	L

CTL / VTR MODE	IC4501-15	IC4501-1
AV1/AV2	H	L
AV3	L	M
MIC IN	–	H
TUNER	L	L

MAIN SIGNAL PATH IN REC MODE MAIN SIGNAL PATH IN PLAYBACK MODE

[redacted]

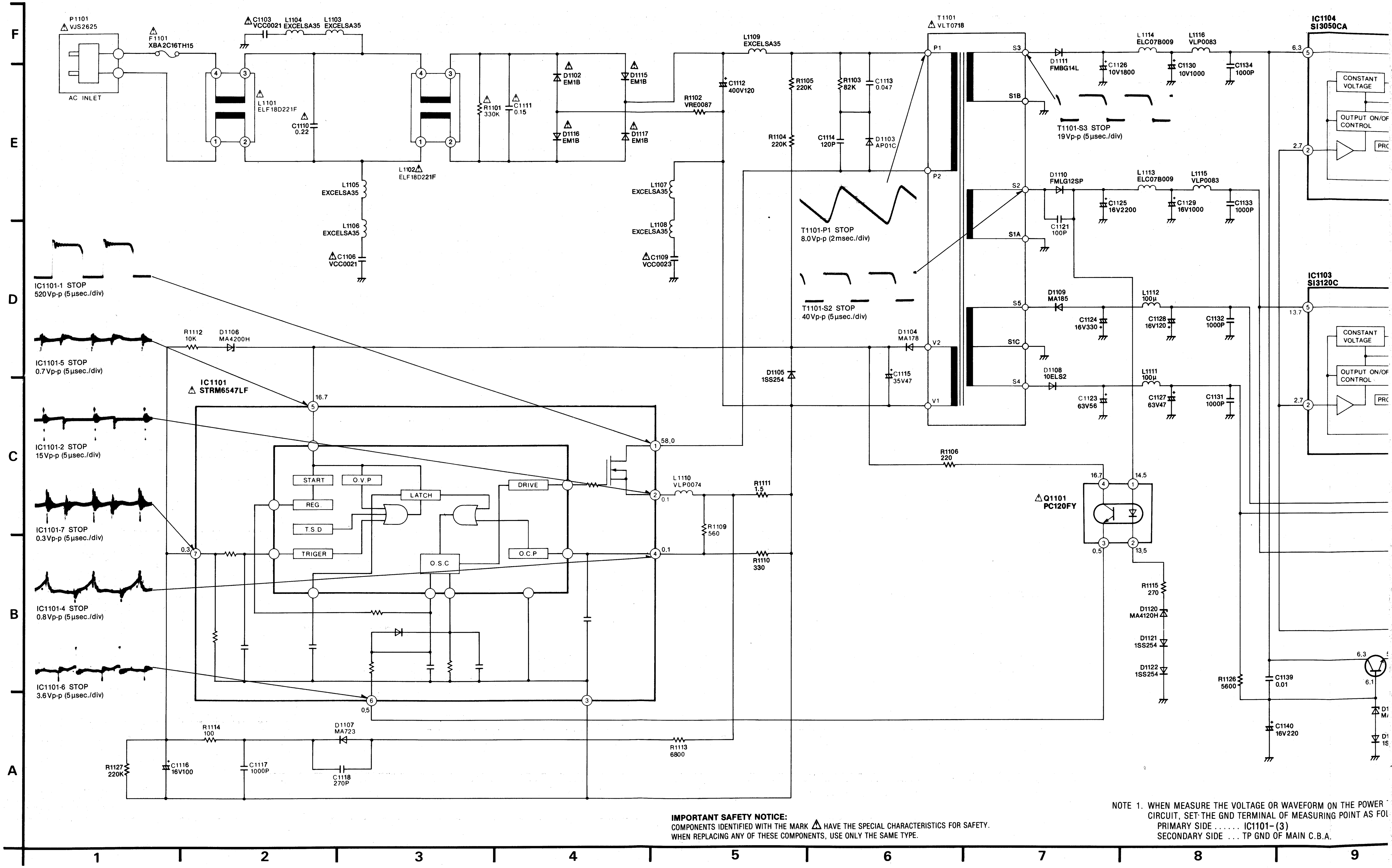

IC4501
IC4501-47 REC
0.3Vp-p (0.2μsec./div)
IC4501-39 PLAY
0.8Vp-p (5msec./div)
IC4501-97, 98, 99 REC/PLAY
0.4Vp-p (0.2msec./div)
IC4501-34 REC
0.4Vp-p (0.2μsec./div)
IC4501-42 PLAY
5.0Vp-p (10msec./div)
FROM A/C HEAD
TO A/C HEAD
TO SYSTEM CONTROL/ TIMER
FROM SYSTEM CONTROL
FROM TIMER
TO RF CONV.
FROM DECODER
PP4001
PP4002
PP4003
<A. HEAD (PB)>
<PB OUT>
<PB ADJ. OUT>
<A. HEAD (REC)>
<Rch Ⓛ>
<Lch Ⓛ>
<AUDIO SEL.>
<TRICK Ⓛ>
<MIX Ⓗ>
<RF OUT>
<AV1/AV2 IN (L)>
<AV3 IN (L)>
<AV3 IN (R)>
<AV1/AV2 IN (R)>
<AUDIO OUT (R)>
<AUDIO OUT (L)>
<MIC IN (L)>
<MIC IN (R)>
<TUNER AUDIO (L)>
<TUNER AUDIO (R)>
<TUNER AUDIO (N)>
<FM MUT Ⓗ>
<FM INSEL B>
<FM INSEL A>
<MIC Ⓗ>
<REC VR (C)>
<REC VR (R)>
<REC VR (L)>
<A. H. SW>
<EE Ⓗ/INSERT Ⓜ>
<NORMAL REC Ⓛ>
<POWER OFF Ⓛ>
<FM OUT (R)>
<FM OUT (L)>
QR4003 (A. MUTE Ⓗ :ON)
QR4002 (CUE/REV Ⓗ :ON)
Q4552 BUFFER
OUTPUT CTRL
FM DET
OUTPUT SW
SW
ATT
INPUT SW
(NORMAL)
(Rch)
(Lch)
EVR
LPF
PEAK NOISE REDUCTION
NOISE REDU. EMPHASIS
D. O. C.
HOLD M. M.
MOD/DEM.
CTL
B. P. F.
EVR REF. V.
P. OFF Ⓛ
C4565
C4515
Rch REC PB LEV. VR4507
Rch FREQ. VR4509
REG 5V
MULTI FREQ. Rch VR4552
QR4509 (PAL Ⓛ :ON)
Q4510 (NTSC Ⓗ :ON)
VR4550 BPF FREQ.
QR4508 (PAL Ⓛ :ON)
VR4502 Lch REC PB LEV.
VR4501 Lch FREQ.
VR4551 MULTI FREQ. Lch
<PAL Ⓛ>
<REC IN>
<RF OUT>
IC4001
AMP
METER (L)
METER (R)
D4003, D4004
D4602
EE LEVEL VR4512
QR4005 (A. DUB Ⓗ :ON)
QR4004 (POWER OFF Ⓗ :ON)
Hi-Fi AUDIO PACK C. B. A.
QR4001 (PAL:ON)
NTSC Ⓛ
FROM SYSTEM CONTROL
IC551
REC AMP
P. B:ON
VCA
PRE AMP
REC:ON
P3001
P501
P502
Hi-Fi AUDIO HEAD L
Hi-Fi AUDIO HEAD R
AUDIO HEAD-R
AUDIO HEAD-L
<A. H. SW>
<FLY ERASE Ⓗ>
Q501, Q502
IC502
OSC
OUTPUT DRIVE
FLYING ERASE HEAD
HEAD AMP C. B. A.

CTL / VTR MODE	IC4501-81	IC4501-80	AUDIO MODE	
			FM	NORMAL
STOP	H	H	EE	EE
REC	L	H	REC	REC
P. B	H	L	P. B	P. B
INSERT	H	M	REC	P. B
A. DUB	L	L	P. B	REC

CTL / VTR MODE	IC4501-15	IC4501-11	AUDIO MODE	
			FM	NORMAL
AV1/AV2	H	L	AV1/AV2 IN	AV1/AV2 IN
AV3	L	M	AV3 IN	AV3 IN
MIC IN	–	H	MIC IN	MIC IN
TUNER	L	L	TUNER	TUNER

SECTION 4
SCHEMATIC DIAGRAMS

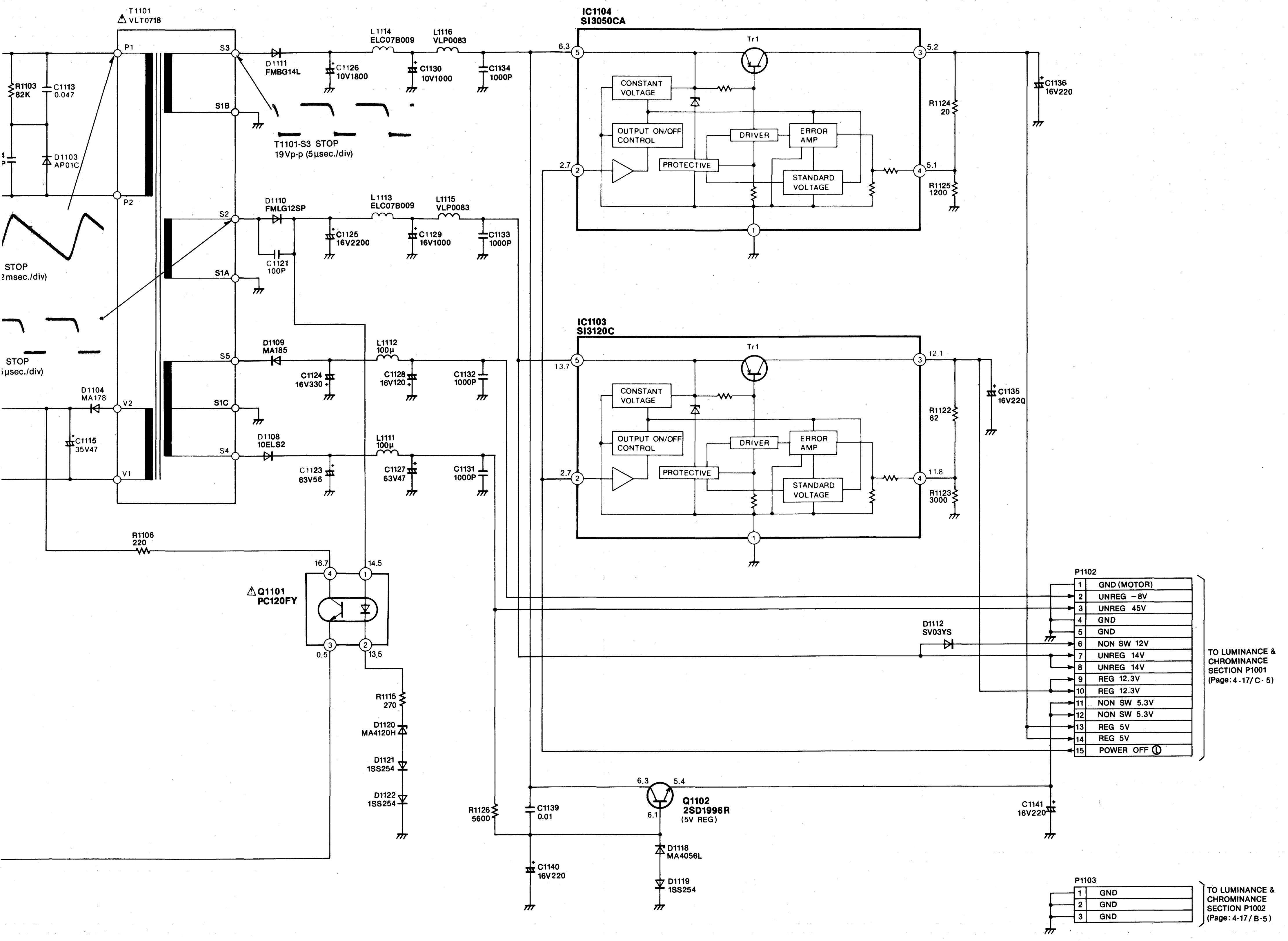
4-1. POWER SCHEMATIC DIAGRAM


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
P1101
⚠ VJS2625
AC INLET
⚠ F1101
XBA2C16TH15
⚠ C1103
VCC0021
L1104
EXCELSA35
L1103
EXCELSA35
⚠ L1101
ELF18D221F
⚠ C1110
0.22
L1105
EXCELSA35
L1106
EXCELSA35
⚠ C1106
VCC0021
L1102 ⚠
ELF18D221F
⚠ R1101
330K
⚠ C1111
0.15
⚠ D1102
EM1B
⚠ D1116
EM1B
⚠ D1115
EM1B
⚠ D1117
EM1B
R1102
VRE0087
L1107
EXCELSA35
L1108
EXCELSA35
⚠ C1109
VCC0023
L1109
EXCELSA35
C1112
400V120
R1105
220K
R1104
220K
R1103
82K
C1113
0.047
C1114
120P
D1103
AP01C
T1101-P1 STOP
8.0Vp-p (2msec./div)
T1101-S2 STOP
40Vp-p (5µsec./div)
T1101
⚠ VLT0718
P1
P2
V2
V1
S3
S1B
S2
S1A
S5
S1C
S4
D1111
FMBG14L
C1126
10V1800
L1114
ELC07B009
L1116
VLP0083
C1130
10V1000
C1134
1000P
T1101-S3 STOP
19Vp-p (5µsec./div)
D1110
FMLG12SP
C1121
100P
C1125
16V2200
L1113
ELC07B009
L1115
VLP0083
C1129
16V1000
C1133
1000P
D1109
MA185
C1124
16V330
L1112
100µ
C1128
16V120
C1132
1000P
D1108
10ELS2
C1123
63V56
L1111
100µ
C1127
63V47
C1131
1000P
IC1104
SI3050CA
6.3
2.7
CONSTANT VOLTAGE
OUTPUT ON/OF
CONTROL
PR
IC1103
SI3120C
13.7
2.7
CONSTANT VOLTAGE
OUTPUT ON/OF
CONTROL
PR
IC1101-1 STOP
520Vp-p (5µsec./div)
IC1101-5 STOP
0.7Vp-p (5µsec./div)
IC1101-2 STOP
15Vp-p (5µsec./div)
IC1101-7 STOP
0.3Vp-p (5µsec./div)
IC1101-4 STOP
0.8Vp-p (5µsec./div)
IC1101-6 STOP
3.6Vp-p (5µsec./div)
R1112
10K
D1106
MA4200H
IC1101
⚠ STRM6547LF
16.7
58.0
0.1
0.1
0.3
0.5
START
O.V.P
REG.
LATCH
DRIVE
T.S.D
TRIGER
O.C.P
O.S.C
D1104
MA178
C1115
35V47
D1105
1SS254
L1110
VLP0074
R1111
1.5
R1109
560
R1110
330
R1106
220
⚠ Q1101
PC120FY
16.7
14.5
0.5
13.5
R1115
270
D1120
MA4120H
D1121
1SS254
D1122
1SS254
R1126
5600
C1139
0.01
C1140
16V220
6.3
6.1
R1114
100
D1107
MA723
C1118
270P
R1113
6800
R1127
220K
C1116
16V100
C1117
1000P

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER
CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOL
PRIMARY SIDE ...... IC1101-(3)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.

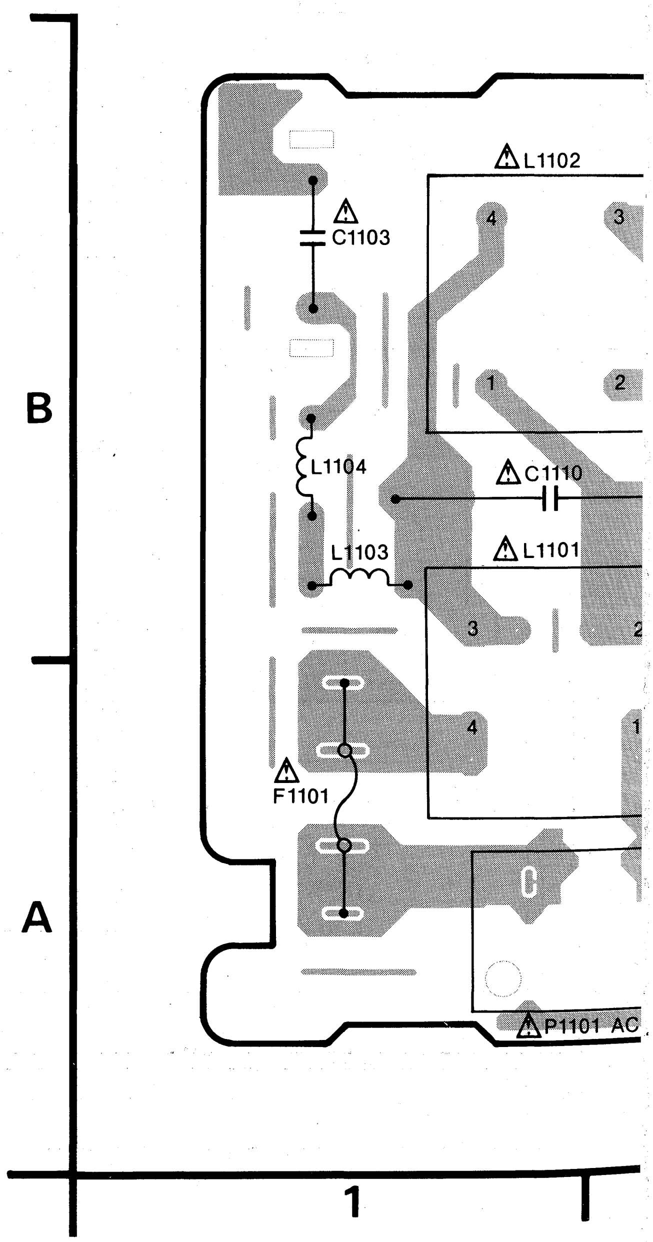
4-2. POWER C.B.A. (VEP01558C)


T1101
⚠VLT0718
P1
P2
V2
V1
S3
S1B
S2
S1A
S5
S1C
S4
R1103 82K
C1113 0.047
D1103 AP01C
STOP
2msec./div)
STOP
μsec./div)
D1104 MA178
C1115 35V47
D1111 FMBG14L
C1126 10V1800
L1114 ELC07B009
C1130 10V1000
L1116 VLP0083
C1134 1000P
T1101-S3 STOP
19Vp-p (5μsec./div)
D1110 FMLG12SP
C1121 100P
C1125 16V2200
L1113 ELC07B009
C1129 16V1000
L1115 VLP0083
C1133 1000P
D1109 MA185
C1124 16V330
L1112 100μ
C1128 16V120
C1132 1000P
D1108 10ELS2
C1123 63V56
L1111 100μ
C1127 63V47
C1131 1000P
IC1104
SI3050CA
IC1103
SI3120C
Tr1
CONSTANT VOLTAGE
OUTPUT ON/OFF CONTROL
DRIVER
ERROR AMP
PROTECTIVE
STANDARD VOLTAGE
6.3
2.7
5.2
5.1
13.7
12.1
11.8
R1124 20
R1125 1200
C1136 16V220
R1122 62
R1123 3000
C1135 16V220
R1106 220
⚠Q1101
PC120FY
16.7
14.5
0.5
13.5
R1115 270
D1120 MA4120H
D1121 1SS254
D1122 1SS254
R1126 5600
C1139 0.01
C1140 16V220
Q1102
2SD1996R
(5V REG)
6.3
5.4
6.1
D1118 MA4056L
D1119 1SS254
C1141 16V220
D1112 SV03YS
P1102
1 GND (MOTOR)
2 UNREG -8V
3 UNREG 45V
4 GND
5 GND
6 NON SW 12V
7 UNREG 14V
8 UNREG 14V
9 REG 12.3V
10 REG 12.3V
11 NON SW 5.3V
12 NON SW 5.3V
13 REG 5V
14 REG 5V
15 POWER OFF Ⓛ
TO LUMINANCE & CHROMINANCE SECTION P1001 (Page: 4-17/C-5)
P1103
1 GND
2 GND
3 GND
TO LUMINANCE & CHROMINANCE SECTION P1002 (Page: 4-17/B-5)

VE THE SPECIAL CHARACTERISTICS FOR SAFETY.
SE ONLY THE SAME TYPE.

NOTE 1. WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT, SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE ...... IC1101-(3)
SECONDARY SIDE ... TP GND OF MAIN C.B.A.

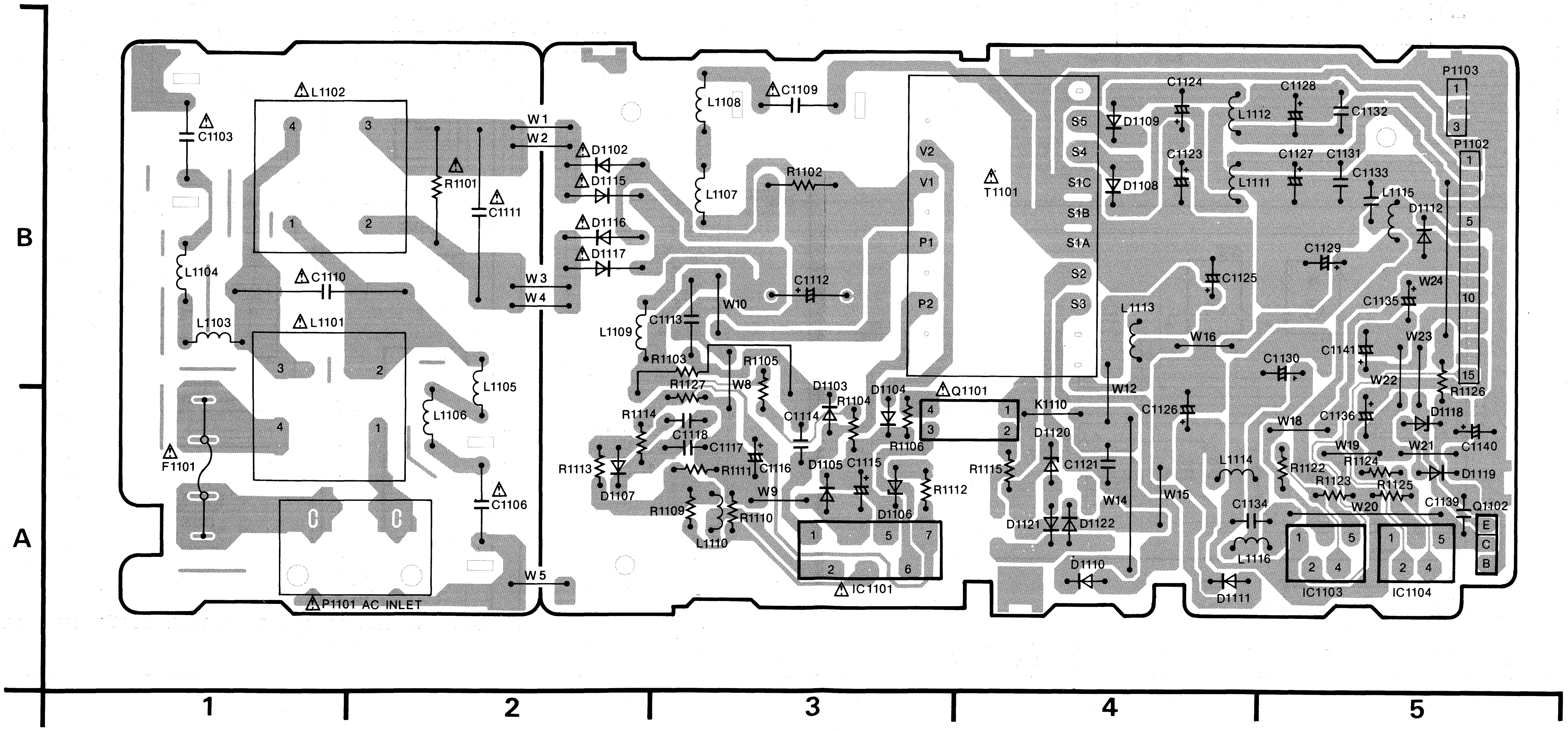
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


B
A
1
⚠L1102
⚠C1103
L1104
⚠C1110
L1103
⚠L1101
⚠F1101
⚠P1101 AC
4
3
1
2
3
4

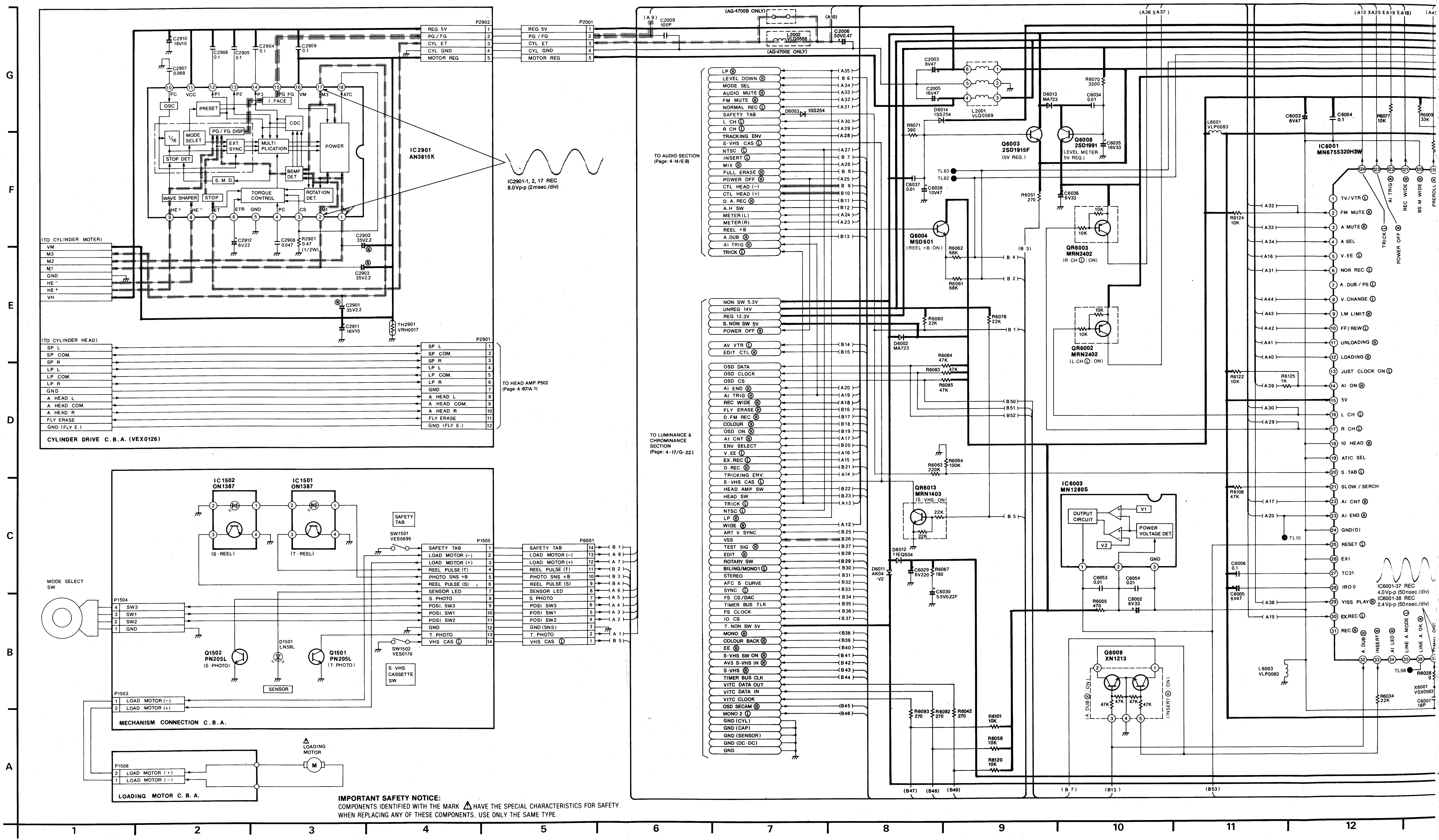
4-2. POWER C.B.A. (VEP01558C)

POWER C.B.A.	
Transistor	
Q1101	A-4
Q1102	A-5
Integrated Circuit	
IC1101	A-3
IC1103	A-5
IC1104	A-5
Connector	
P1101	A-1
P1102	B-5
P1103	B-5

ADDRESS INFORMATION


B
A
1
2
3
4
5
L1102
C1103
R1101
C1111
W1
W2
W3
W4
W5
L1104
C1110
L1103
L1101
L1105
L1106
F1101
C1106
P1101 AC INLET
D1102
D1115
D1116
D1117
L1108
C1109
L1107
R1102
C1112
C1113
L1109
W10
R1103
R1105
R1127
W8
R1114
C1118
C1117
C1116
R1111
R1113
D1107
R1109
R1110
L1110
W9
D1103
R1104
C1114
D1104
R1106
D1105
C1115
D1106
R1112
IC1101
Q1101
K1110
D1120
R1115
C1121
D1121
D1122
D1110
W14
W15
W12
T1101
V2
V1
P1
P2
S5
S4
S1C
S1B
S1A
S2
S3
D1109
D1108
C1124
C1123
L1112
L1111
C1128
C1127
C1132
C1131
C1133
L1115
D1112
C1129
C1125
L1113
W16
C1130
C1126
C1135
W24
C1141
W23
W22
R1126
D1118
C1136
W18
R1122
W19
R1124
R1123
R1125
W20
W21
C1140
D1119
C1139
Q1102
E
C
B
L1114
C1134
L1116
D1111
IC1103
IC1104
P1103
P1102
1
3
5
10
15

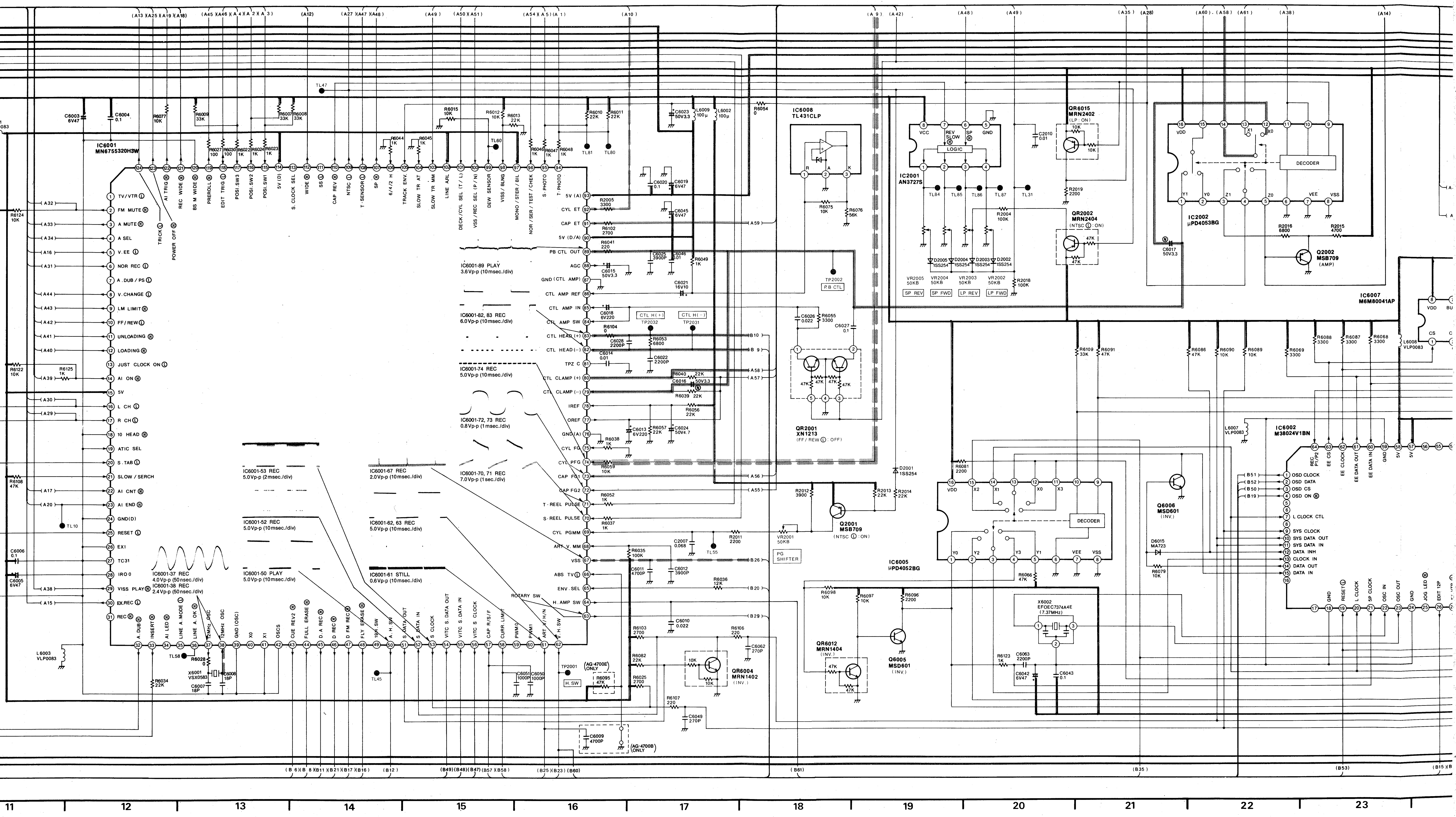
4-3. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM


IC2901 AN3815K
OSC
PRESET
1/16
MODE SELET
PG/FG DISP
EXT. SYNC
MULTI PLICATION
I. FACE
CDC
POWER
STOP DET
S. M. D.
BEMF DET
WAVE SHAPER
STOP
TORQUE CONTROL
ROTATION DET.
IC2901-1, 2, 17 REC
8.0Vp-p (2msec./div)
P2902
REG 5V
PG / FG
CYL ET
CYL GND
MOTOR REG
P2001
(TO CYLINDER MOTER)
VM
M3
M2
M1
GND
HE−
HE+
VH
(TO CYLINDER HEAD)
SP L
SP COM.
SP R
LP L
LP COM.
LP R
GND
A HEAD L
A HEAD COM.
A HEAD R
FLY ERASE
GND (FLY E.)
P2901
TO HEAD AMP P502 (Page: 4-67/A-1)
CYLINDER DRIVE C.B.A. (VEX0126)
TH2901 VRH0017
IC1502 ON1387
IC1501 ON1387
(S·REEL)
(T·REEL)
SAFETY TAB
SW1501 VES0695
P1505
P6001
SAFETY TAB
LOAD MOTOR (−)
LOAD MOTOR (+)
REEL PULSE (T)
PHOTO SNS +B
REEL PULSE (S)
SENSOR LED
S. PHOTO
POSI. SW3
POSI. SW1
POSI. SW2
GND
T. PHOTO
VHS CAS Ⓛ
MODE SELECT SW
P1504
SW3
SW1
SW2
GND
Q1502 PN205L (S·PHOTO)
D1501 LN59L
SENSOR
Q1501 PN205L (T·PHOTO)
SW1502 VES0176
S-VHS CASSETTE SW
P1503
LOAD MOTOR (−)
LOAD MOTOR (+)
MECHANISM CONNECTION C.B.A.
LOADING MOTOR
P1508
LOADING MOTOR C. B. A.
(AG-4700B ONLY)
(AG-4700E ONLY)
L2002 VLQ0556
C2009 100P
C2006 50V0.47
TO AUDIO SECTION (Page: 4-14/E-9)
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-17/G-22)
LP Ⓗ
LEVEL DOWN Ⓗ
MODE SEL
AUDIO MUTE Ⓗ
FM MUTE Ⓗ
NORMAL REC Ⓛ
SAFETY TAB
L CH Ⓛ
R CH Ⓛ
TRACKING ENV
S-VHS CAS Ⓛ
NTSC Ⓛ
INSERT Ⓛ
MIX Ⓗ
FULL ERASE Ⓗ
POWER OFF Ⓗ
CTL HEAD (−)
CTL HEAD (+)
D.A. REC Ⓗ
A.H SW
METER (L)
METER (R)
REEL +B
A.DUB Ⓗ
AI TRIG Ⓗ
TRICK Ⓛ
NON SW 5.3V
UNREG 14V
REG 12.3V
S.NON SW 5V
POWER OFF Ⓗ
AV VTR Ⓛ
EDIT CTL Ⓗ
OSD DATA
OSD CLOCK
OSD CS
AI END Ⓗ
AI TRIG Ⓗ
REC WIDE Ⓗ
FLY ERASE Ⓗ
D.FM REC Ⓗ
COLOUR Ⓗ
OSD ON Ⓗ
AI CNT Ⓗ
ENV SELECT
V.EE Ⓛ
EX. REC Ⓛ
D.REC Ⓗ
TRICKING ENV.
S-VHS CAS Ⓛ
HEAD AMP SW
HEAD SW
TRICK Ⓛ
NTSC Ⓛ
LP Ⓗ
WIDE Ⓗ
ART V SYNC
VSS
TEST SIG Ⓗ
EDIT Ⓗ
ROTARY SW
BILING/MONO1 Ⓛ
STEREO
AFC S CURVE
SYNC Ⓛ
FS CS/DAC
TIMER BUS TLK
FS CLOCK
IO CS
T. NON SW 5V
MONO Ⓗ
COLOUR BACK Ⓗ
EE Ⓗ
S-VHS SW ON Ⓗ
AV3 S-VHS IN Ⓗ
S-VHS Ⓗ
TIMER BUS CLK
VITC DATA OUT
VITC DATA IN
VITC CLOCK
OSD SECAM Ⓗ
MONO 2 Ⓛ
GND (CYL)
GND (CAP)
GND (SENSOR)
GND (DC-DC)
GND
Q6003 2SD1915F (5V REG.)
Q6008 2SD1991 (LEVEL METER 5V REG.)
L2001 VLQ0569
Q6004 MSD601 (REEL +B: ON)
QR6003 MRN2402 (R CH Ⓛ: ON)
QR6002 MRN2402 (L CH Ⓛ: ON)
QR6013 MRN1403 (S-VHS: ON)
IC6003 MN1280S
OUTPUT CIRCUIT
POWER VOLTAGE DET
Q6009 XN1213
A.DUB Ⓛ ON
INSERT Ⓛ ON
IC6001 MN6755320H3W
L6001 VLP0083
L6003 VLP0083
TV/VTR Ⓛ
FM MUTE Ⓗ
A MUTE Ⓗ
A SEL
V.EE Ⓛ
NOR REC Ⓛ
A.DUB/PS Ⓛ
V.CHANGE Ⓛ
LM LIMIT Ⓗ
FF/REW Ⓛ
UNLOADING Ⓗ
LOADING Ⓗ
JUST CLOCK ON Ⓛ
AI ON Ⓗ
5V
L CH Ⓛ
R CH Ⓛ
10 HEAD Ⓗ
ATIC SEL
S.TAB Ⓛ
SLOW / SERCH
AI CNT Ⓗ
AI END Ⓗ
GND(D)
RESET Ⓛ
EXI
TC31
IRO 0
VISS PLAY Ⓗ
EX.REC Ⓛ
REC Ⓗ
IC6001-37 REC 4.0Vp-p (50nsec./div)
IC6001-38 REC 2.4Vp-p (50nsec./div)
TRICK Ⓛ
POWER OFF Ⓗ
AI TRIG Ⓗ
REC WIDE Ⓗ
BS M WIDE Ⓗ
PREROLL
X6001 VSX0583
TL10
TL58
TL82
TL83
1
2
3
4
5
6
7
8
9
10
11
12
A
B
C
D
E
F
G

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CAPSTAN SERVO SPEED LOOP

CAPSTAN SERVO PHASE LOOP

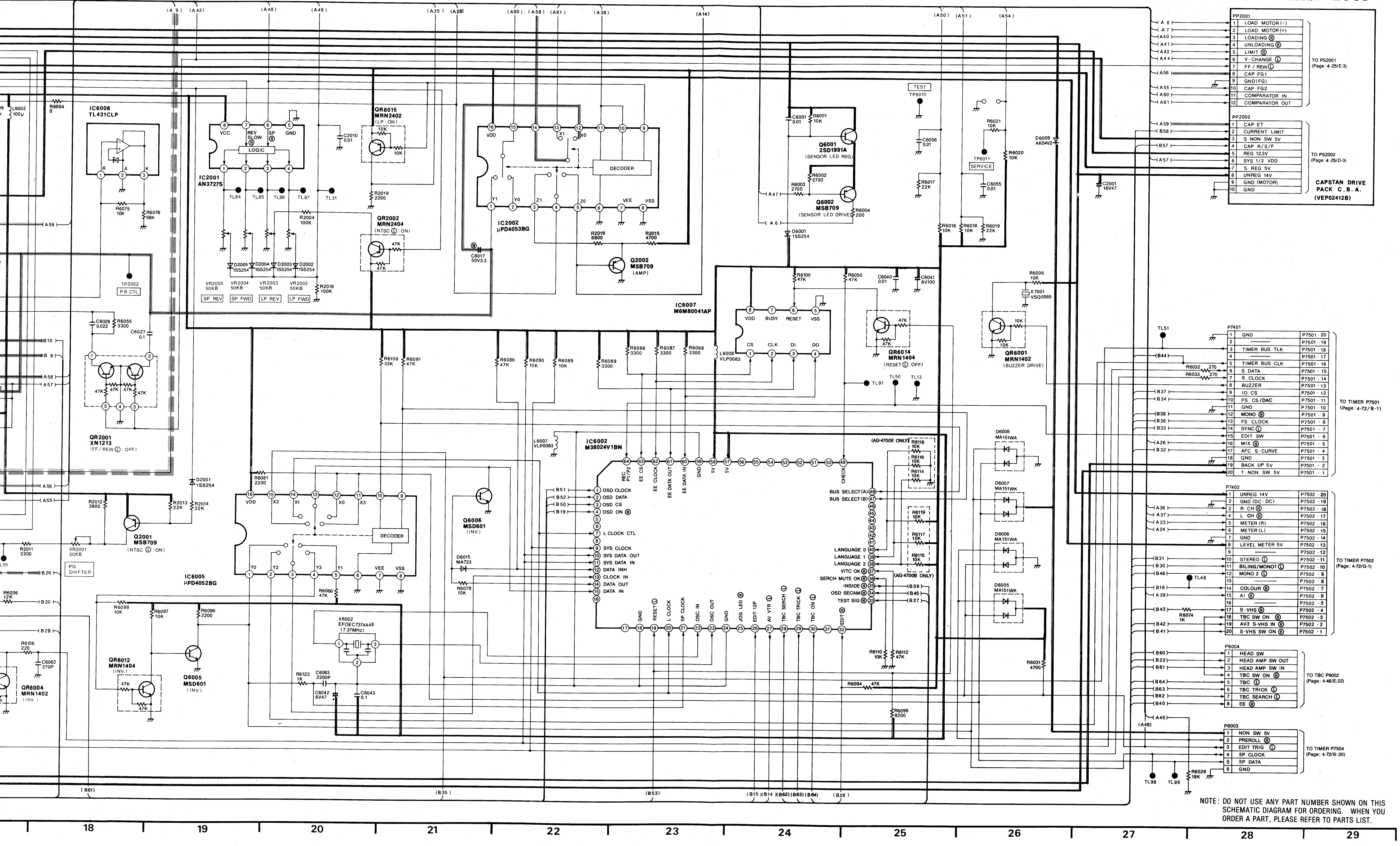

IC6001
MN6755320H3W
IC6008
TL431CLP
IC2001
AN3722S
QR6015
MRN2402
QR2002
MRN2404
IC2002
µPD4053BG
Q2002
MSB709
IC6007
M6M80041AP
QR2001
XN1213
Q2001
MSB709
IC6005
µPD4052BG
Q6006
MSD601
IC6002
M38024V1BN
QR6012
MRN1404
Q6005
MSD601
QR6004
MRN1402
X6002
EFOEC7374A4E
(7.37MHz)
X6001
VSX0583
IC6001-89 PLAY
3.6Vp-p (10msec./div)
IC6001-82, 83 REC
6.0Vp-p (10msec./div)
IC6001-74 REC
5.0Vp-p (10msec./div)
IC6001-72, 73 REC
0.8Vp-p (1msec./div)
IC6001-70, 71 REC
7.0Vp-p (1sec./div)
IC6001-53 REC
5.0Vp-p (2msec./div)
IC6001-67 REC
2.0Vp-p (10msec./div)
IC6001-52 REC
5.0Vp-p (10msec./div)
IC6001-62, 63 REC
5.0Vp-p (10msec./div)
IC6001-50 PLAY
5.0Vp-p (10msec./div)
IC6001-61 STILL
0.6Vp-p (10msec./div)
IC6001-37 REC
4.0Vp-p (50nsec./div)
IC6001-38 REC
2.4Vp-p (50nsec./div)
VR2001 50KB
PG SHIFTER
SP REV
SP FWD
LP REV
LP FWD
P.B CTL
H.SW
(AG-4700E) ONLY
(AG-4700B) ONLY
DECODER
LOGIC
11
12
13
14
15
16
17
18
19
20
21
22
23

CAPSTAN SERVO SPEED LOOP

CAPSTAN SERVO PHASE LOOP

CYLINDER SERVO SPEED LOOP

CYLINDER SERVO PHASE LOOP


IC6008 TL431CLP
IC2001 AN3727S
QR6015 MRN2402 (LP: ON)
QR2002 MRN2404 (NTSC Ⓛ: ON)
IC2002 μPD4053BG
Q2002 MSB709 (AMP)
Q6001 2SD1991A (SENSOR LED REG)
Q6002 MSB709 (SENSOR LED DRIVE)
IC6007 M6M80041AP
QR6014 MRN1404 (RESET Ⓛ: OFF)
QR6001 MRN1402 (BUZZER DRIVE)
QR2001 XN1213 (FF / REW Ⓛ: OFF)
Q2001 MSB709 (NTSC Ⓛ: ON)
IC6005 μPD4052BG
Q6006 MSD601 (INV.)
Q6005 MSD601 (INV.)
QR6012 MRN1404 (INV.)
QR6004 MRN1402 (INV.)
IC6002 M38024V1BN
X6002 EFOEC7374A4E (7.37MHz)
X7001 VSQ0565
TEST TP6010
SERVICE TP6011
P.B CTL TP2002
SP REV
SP FWD
LP REV
LP FWD
PG SHIFTER
PP2001
1 LOAD MOTOR (−)
2 LOAD MOTOR (+)
3 LOADING Ⓗ
4 UNLOADING Ⓗ
5 LIMIT Ⓗ
6 V·CHANGE Ⓛ
7 FF / REW Ⓛ
8 CAP FG1
9 GND (FG)
10 CAP FG2
11 COMPARATOR IN
12 COMPARATOR OUT
TO PS2001 (Page: 4-25/E-3)
PP2002
1 CAP ET
2 CURRENT LIMIT
3 S.NON SW 5V
4 CAP R/S/F
5 REG 12.3V
6 SYS 1/2 VDD
7 S.REG 5V
8 UNREG 14V
9 GND (MOTOR)
10 GND
TO PS2002 (Page: 4-25/D-3)
CAPSTAN DRIVE PACK C.B.A. (VEP02412B)
P7401
1 GND
3 TIMER BUS TLK
5 TIMER BUS CLK
6 S.DATA
7 S.CLOCK
8 BUZZER
9 IO CS
10 FS CS/DAC
11 GND
12 MONO Ⓗ
13 FS CLOCK
14 SYNC Ⓛ
15 EDIT SW
16 MIX Ⓗ
17 AFC S-CURVE
18 GND
19 BACK UP 5V
20 T.NON SW 5V
TO TIMER P7501 (Page: 4-72/B-1)
P7402
1 UNREG 14V
2 GND (DC·DC)
3 R CH Ⓗ
4 L CH Ⓗ
5 METER (R)
6 METER (L)
7 GND
8 LEVEL METER 5V
10 STEREO Ⓛ
11 BILING/MONO1 Ⓛ
12 MONO 2 Ⓛ
14 COLOUR Ⓗ
15 AI Ⓗ
17 S-VHS Ⓗ
18 TBC SW ON Ⓗ
19 AV3 S-VHS IN Ⓗ
20 S-VHS SW ON Ⓗ
TO TIMER P7502 (Page: 4-72/G-1)
P6004
1 HEAD SW
2 HEAD AMP SW OUT
3 HEAD AMP SW IN
4 TBC SW ON Ⓗ
5 TBC Ⓛ
6 TBC TRICK Ⓛ
7 TBC SEARCH Ⓛ
8 EE Ⓗ
TO TBC P9002 (Page: 4-46/E-22)
P6003
1 NON SW 5V
2 PREROLL Ⓗ
3 EDIT TRIG Ⓛ
4 SP CLOCK
5 SP DATA
6 GND
TO TIMER P7504 (Page: 4-72/B-20)
18
19
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29

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	IC2001																			
MODE	1	2	3	4	5	6	7	8												
STOP	0	5.0	0	0	0	5.0	0	5.0												
PLAY	0	5.0	0	0	0	5.0	0	5.0												
REC	0	4.9	0	0	0	5.0	0	5.0												
F.F	0	5.0	0	0	0	5.0	0	5.0												
REW	5.0	0	0	0	0	5.0	5.0	5.0												

REF. NO.	IC2002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	2.5	2.3	1.4	1.4	1.0	0	0	0	5.0	0	0	2.6	0	2.6	2.3	5.2				
PLAY	2.6	2.3	2.6	2.6	2.0	0	0	0	5.0	0	0	2.5	0	2.5	2.3	5.2				
REC	2.5	2.3	1.1	1.1	0.6	0	0	0	5.0	0	0	2.6	0	2.6	2.3	5.2				
F.F	2.5	2.3	1.6	1.6	1.0	0	0	0	5.0	0	0	2.6	0	2.6	2.3	5.2				
REW	2.5	2.3	1.2	1.2	0.6	0	0	0	5.0	0	0	2.6	0	2.6	2.3	5.2				

REF. NO.	IC2901																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
STOP	14.8	14.6	0.1	1.2	0.1	2.6	2.5	2.6	2.5	2.7	5.2	3.8	3.9	3.8	1.2	14.4	14.6	0.1		
PLAY	14.5	13.9	0.1	1.1	0.1	2.6	2.5	2.6	2.5	2.8	5.2	3.9	3.9	3.8	1.5	14.3	14.4	0.1		
REC	14.8	14.7	0.1	1.2	0.1	2.6	2.5	2.6	2.5	2.8	5.2	3.9	3.9	3.9	1.4	14.3	14.4	0.1		
F.F	14.1	13.8	0.1	1.1	0.1	2.6	2.5	2.6	2.5	2.8	5.2	3.9	3.8	3.8	1.5	14.3	13.7	0.1		
REW	14.5	13.5	0.1	1.1	0.1	2.6	2.5	2.6	2.5	2.8	5.2	3.8	3.8	3.9	1.5	14.3	14.5	0.1		

REF. NO.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0	0.1	0	5.0	0.1	5.0	5.0	4.9	0.1	4.9	0	0	5.0	4.9	5.0	0	0	0	0	0
PLAY	0	0.1	0	5.0	5.0	5.0	5.0	4.9	0.1	4.9	0	0	5.0	4.9	5.0	0	0	0	0	0
REC	0	0.1	0	5.0	0.1	0	5.0	4.9	0.1	4.9	0	0	5.0	4.9	5.0	0	0	0	0	0
F.F	0	0.1	0	5.0	0.1	5.0	5.0	0	0.1	0	0	0	5.0	4.9	5.0	0	0	0	0	0
REW	0	0.1	0	5.0	0.1	5.0	5.0	0	0.1	0	0	0	5.0	4.9	5.0	0	0	0	0	0

REF. NO.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.0	0.1	5.0	0	5.0	0	0	0	0	0	0	0	0	5.0	5.0	0	2.7	2.7	0	5.0
PLAY	5.0	0.1	0.2	0	5.0	0	0	0	0	0	0	0	0	5.0	5.0	0	2.7	2.7	0	5.0
REC	5.0	0.1	5.0	0	5.0	0	0	0	0	4.9	5.0	0	0	5.0	5.0	0	2.7	2.7	0	5.0
F.F	5.0	0.1	5.0	0	5.0	0	0	0	0	0	0	0	0	5.0	5.0	0	2.7	2.7	0	5.0
REW	5.0	0.1	5.0	0	5.0	0	0	0	0	0	0	0	0	5.0	5.0	0	2.7	2.7	0	5.0

REF. NO.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0.1	0	0	5.0	0	1.8	0.9	4.5	4.8	5.0	4.8	2.0	0	2.6	2.5
PLAY	0	0	0	0	0	0.1	0	0	5.0	3.7	1.7	0.9	4.5	4.8	5.0	4.8	0	5.0	2.7	2.5
REC	0	0	0	5.0	5.0	5.0	5.0	0	5.0	0	1.7	0.9	4.5	4.8	5.0	4.8	0	5.0	2.6	2.5
F.F	0	0	0	0	0	0.1	0	0	5.0	0	1.7	0.8	4.5	4.8	5.0	4.8	0	5.0	5.0	2.5
REW	0	0	0	0	0	0.1	0	0	5.0	0	1.7	0.9	4.5	4.8	5.0	4.8	5.0	5.0	5.0	2.5

REF. NO.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	0	5.0	5.0	0	4.0	5.0	2.5	0.3	3.5	5.0	0	2.5	2.5	1.5	0	0	2.5	2.5	2.4	2.6
PLAY	0	3.7	5.0	0	4.0	5.0	2.5	0.3	3.7	5.0	5.0	2.5	2.5	1.5	0	0	2.5	2.5	3.0	2.5
REC	0	5.0	5.0	0	4.5	5.0	2.5	0.3	3.8	5.0	5.0	2.5	2.5	1.5	0	0	2.5	2.5	2.4	2.6
F.F	0	5.0	5.0	0	2.4	5.0	2.5	0.3	3.7	2.5	2.9	2.5	2.5	1.2	0	0	2.5	2.5	2.5	2.6
REW	0	4.0	3.6	0	2.5	5.0	2.5	0.3	3.7	2.7	2.5	2.5	2.5	1.3	0	0	2.5	2.5	2.5	2.6

REF. NO.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	4.9	0	0	0	2.5	2.5	0	2.7	2.5	5.0	1.4	2.5	5.0	3.5	5.0	5.0	5.0	3.5	0	3.5
PLAY	5.0	0	0	0	2.5	2.5	0	3.0	2.5	5.0	2.5	2.5	5.0	4.1	5.0	5.0	5.0	3.5	0	3.5
REC	4.9	3.7	3.9	0	2.5	2.5	0	2.7	2.5	5.0	2.7	2.5	5.0	4.1	4.8	5.0	5.0	3.5	0	3.5
F.F	5.0	0	0	0	2.5	2.5	0	3.1	2.5	5.0	2.3	2.5	5.0	4.4	4.9	5.0	5.0	3.5	0	3.5
REW	5.0	0	0	0	2.5	2.5	0	3.1	2.5	5.0	2.4	2.5	5.0	4.4	4.9	5.0	5.0	3.5	0	3.5

REF. NO.	IC6001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
STOP	3.5	5.0	2.3	0	1.6	0	5.0	5.0	5.0	0	5.0	0	4.5	5.0	0	0	5.0	5.0	0	0
PLAY	3.5	5.0	2.6	0	2.7	0	5.0	0.2	5.0	0	5.0	0	4.5	5.0	0	0	5.0	5.0	0	0
REC	3.5	5.0	2.6	0	1.2	0	5.0	0.2	5.0	0	5.0	0	4.5	5.0	0	0	5.0	5.0	0	0
F.F	3.5	5.0	2.6	0	1.2	0	5.0	0.2	5.0	0	5.0	0	4.5	5.0	0	5.0	5.0	5.0	0	0
REW	3.5	5.0	2.3	0	1.2	0	5.0	0.2	5.0	5.0	5.0	0	4.5	5.0	0	5.0	5.0	5.0	0	0

REF. NO.	IC6001																			
MODE	121	122	123	124																
STOP	0	0	0	5.0																
PLAY	0	0	0	5.0																
REC	0	0	0	5.0																
F.F	0	0	0	5.0																
REW	0	0	0	5.0																

REF. NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.8	4.7	4.6	0	0	0	5.0	0	4.5	0.9	0.9	0	4.8	3.1	4.7	0	0	0	4.9	5.0
PLAY	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
REC	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
F.F	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
REW	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0

REF. NO.	IC6002																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.0	2.2	2.4	0	0	0	5.0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
PLAY	5.0	2.2	2.4	0	0	0	0	5.0	5.0	0	0	0	0	0.2	0	0	4.5	0	0	0
REC	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
F.F	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
REW	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0

REF. NO.	IC6002																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
PLAY	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
REC	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
F.F	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
REW	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0

REF. NO.	IC6002																			
MODE	61	62	63	64																
STOP	0.1	5.0	5.0	5.0																
PLAY	0.1	5.0	5.0	5.0																
REC	0.1	5.0	5.0	5.0																
F.F	0.1	5.0	5.0	5.0																
REW	0.1	5.0	5.0	5.0																

REF. NO.	IC6003																			
MODE	1	2	3																	
STOP	5.0	5.0	0																	
PLAY	5.0	5.0	0																	
REC	5.0	5.0	0																	
F.F	5.0	5.0	0																	
REW	5.0	5.0	0																	

REF. NO.	IC6005																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.6	5.0	4.6	5.0				
PLAY	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.6	5.0				
REC	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.6	5.0				
F.F	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.7	5.0				
REW	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.7	5.0				

REF. NO.	IC6007										IC6008									
MODE	1	2	3	4	5	6	7	8			1	2	3							
STOP	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							
PLAY	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							
REC	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							
F.F	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							
REW	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							

INPUT

PIN NO.
1
2
3
4
5, 6
7
8
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10
11
12
13
14
15
16, 17
18
19

DE)

20
0
0
0
0
0
40
5.0
5.0
5.0
5.0
5.0
60
2.5
2.5
2.5
2.5
2.5
80
2.6
2.5
2.6
2.6
2.6
100
3.5
3.5
3.5
3.5
3.5
120
0
0
0
0
0

REF. NO.	IC6002																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	4.8	4.7	4.6	0	0	0	5.0	0	4.5	0.9	0.9	0	4.8	3.1	4.7	0	0	0	4.9	5.0
PLAY	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
REC	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
F.F	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
REW	4.8	4.7	4.6	0	0	0	5.0	0	4.5	1.0	1.0	0	4.8	3.1	4.7	0	0	0	4.9	5.0
REF. NO.	IC6002																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	5.0	2.2	2.4	0	0	0	5.0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
PLAY	5.0	2.2	2.4	0	0	0	0	5.0	5.0	0	0	0	0	0.2	0	0	4.5	0	0	0
REC	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
F.F	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
REW	5.0	2.2	2.4	0	0	0	0	5.0	5.0	5.0	0	0	0	0.2	0	0	4.5	0	0	0
REF. NO.	IC6002																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
PLAY	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
REC	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
F.F	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
REW	0	0	0	0	0	0	5.0	0	5.0	0	0	0	0	0	0	0	5.0	5.0	0	5.0
REF. NO.	IC6002																			
MODE	61	62	63	64																
STOP	0.1	5.0	5.0	5.0																
PLAY	0.1	5.0	5.0	5.0																
REC	0.1	5.0	5.0	5.0																
F.F	0.1	5.0	5.0	5.0																
REW	0.1	5.0	5.0	5.0																
REF. NO.	IC6003																			
MODE	1	2	3																	
STOP	5.0	5.0	0																	
PLAY	5.0	5.0	0																	
REC	5.0	5.0	0																	
F.F	5.0	5.0	0																	
REW	5.0	5.0	0																	
REF. NO.	IC6005																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.6	5.0	4.6	5.0				
PLAY	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.6	5.0				
REC	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.6	5.0				
F.F	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.7	5.0				
REW	5.0	4.8	4.8	4.3	5.0	0	0	0	5.0	0	5.0	5.0	4.7	5.0	4.7	5.0				
REF. NO.	IC6007										IC6008									
MODE	1	2	3	4	5	6	7	8			1	2	3							
STOP	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							
PLAY	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							
REC	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							
F.F	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							
REW	5.0	5.0	0.1	5.0	0	0	5.0	5.0			2.3	0	2.9							

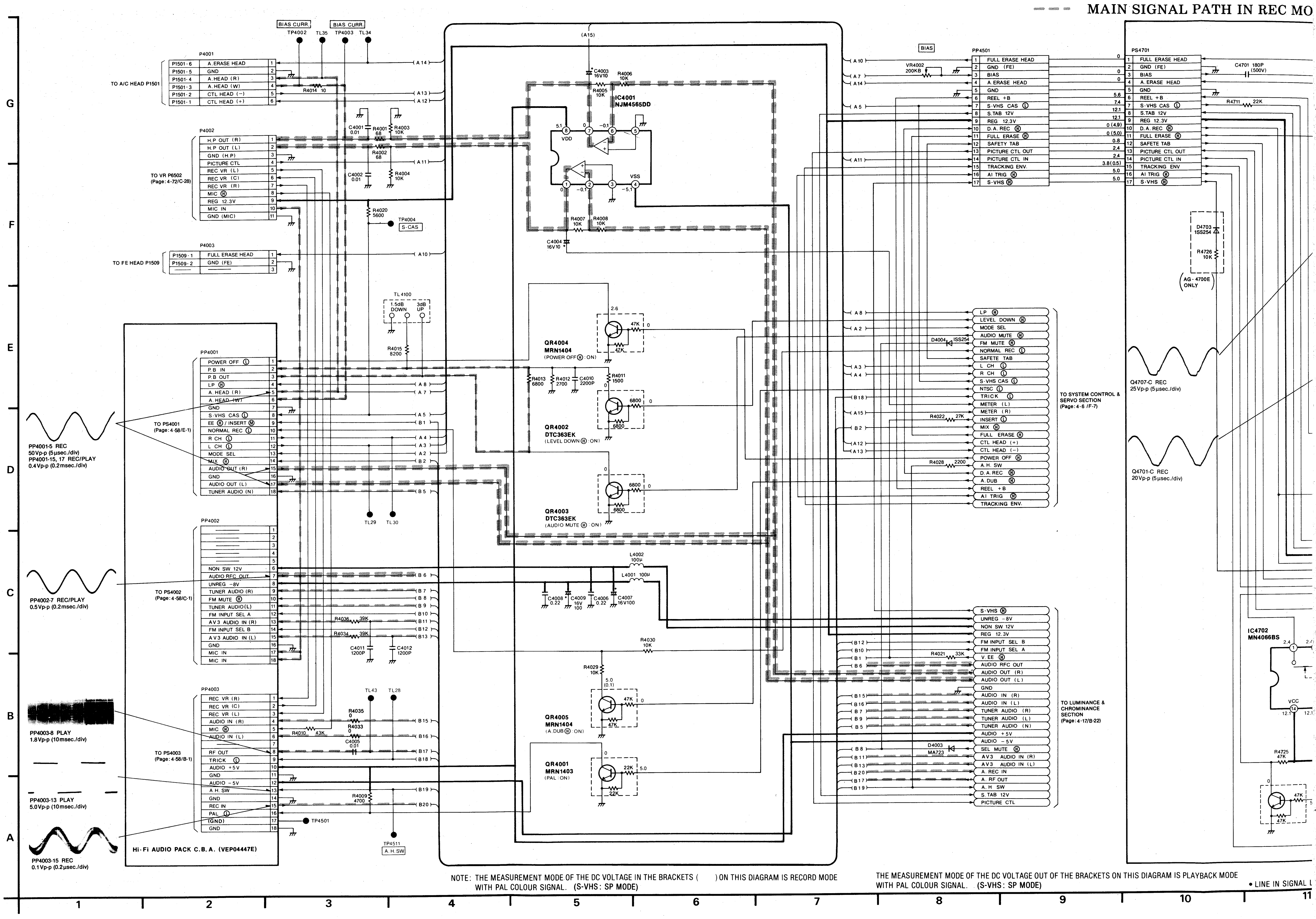
SYSTEM CONTROL & SERVO TRANSISTORs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	Q2001			Q2002			Q6001			Q6002			Q6003			Q6004		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
STOP	5.0	4.8	5.0	1.6	0	1.0	5.1	14.4	5.6	5.1	−0.2	5.0	5.2	5.4	5.9	5.0	5.0	5.7
PLAY	5.0	4.8	5.0	2.6	0	2.0	5.0	14.4	5.6	5.0	4.8	4.2	5.2	5.4	5.9	5.0	5.0	5.7
REC	5.0	4.8	4.9	1.1	0	0.5	4.9	14.3	5.6	4.9	4.8	4.2	5.2	5.4	5.9	5.0	5.0	5.5
F.F	5.0	4.8	5.0	1.1	0	1.1	5.0	14.3	5.6	5.0	4.9	4.2	5.2	5.4	5.9	5.0	5.0	5.7
REW	5.0	4.8	5.0	1.1	0	0.5	5.0	14.3	5.6	5.0	4.8	4.2	5.2	5.4	5.9	5.0	5.0	5.7
REF. NO.	Q6005			Q6006			Q6008											
MODE	E	C	B	E	C	B	E	C	B									
STOP	0	4.9	0.1	0	4.7	0.1	5.0	5.1	5.8									
PLAY	0	4.9	0.1	0	4.7	0.1	5.0	5.1	5.8									
REC	0	4.9	0.1	0	4.7	0.1	5.0	5.1	5.8									
F.F	0	4.8	0.1	0	4.7	0.1	5.0	5.1	5.8									
REW	0	4.8	0.1	0	4.7	0.1	5.0	5.1	5.8									
REF. NO.	QR2001						QR2002			QR6001			QR6002			QR6003		
MODE	1	2	3	4	5		E	C	B	E	C	B	E	C	B	E	C	B
STOP	0	0	4.9	0	4.9		5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
PLAY	0	0	4.9	0	4.9		5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
REC	0	0	4.9	0	4.9		5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
F.F	0	1.0	0	0	0		5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
REW	0	1.0	0	0	0		5.0	0	5.0	0	0	5.0	5.0	5.0	0	5.0	5.0	0
REF. NO.	QR6004			QR6009						QR6012			QR6013			QR6014		
MODE	E	C	B	1	2	3	4	5		E	C	B	E	C	B	E	C	B
STOP	0	0.9	1.7	5.1	0	0	0	0		0	0.1	4.3	0	0	7.0	0	0	4.9
PLAY	0	0.9	1.7	0.5	0	0	0	0		0	0.1	4.3	0	0	7.0	0	0	4.9
REC	0	1.0	1.7	5.1	0	0	0	0		0	0.1	4.3	0	0	7.0	0	0	4.9
F.F	0	1.0	1.7	5.1	0	0	0	0		0	0.1	4.3	0	0	7.0	0	0	4.9
REW	0	0.9	1.7	5.1	0	0	0	0		0	0.1	4.3	0	0	7.0	0	0	4.9
REF. NO.	QR6015																	
MODE	E	C	B															
STOP	5.2	0.3	5.0															
PLAY	5.2	0.3	5.0															
REC	5.2	0.3	5.0															
F.F	5.2	0.3	5.0															
REW	5.2	0.3	5.0															

INPUT/OUTPUT CHART FOR IC6002 (M38024V1BN)

PIN NO.	I/O	PORT NAME	PIN NO.	I/O	PORT NAME	PIN NO.	I/O	PORT NAME
1	O	OSD CLK	20	I	L CLK	37	I	VITC OK (H)
2	O	OSD DATA	21	I	5P CLK	38	I	LANGUAGE 2
3	O	OSD CS	22	I	OSC IN	39	I	LANGUAGE 1
4	O	OSD ON (H)	23	O	OSC OUT	40	I	LANGUAGE 0
5, 6	–	—	24	–	GND	41–46	–	—
7	I	L CLK CNT	25	O	JOG LED (H)	47	O	BUS SELECT (B)
8	–	—	26	O	EDIT 21P	48	O	BUS SELECT (A)
9	I	SYS CLK	27	O	AV VTR (L)	49	I	CHECK (L)
10	O	SYS OUT	28	O	TBC SEARCH Ⓛ	50–56	–	—
11	I	SYS IN	29	O	TBC TRICK Ⓛ	57, 58	I	VDD
12	O	DATA INH	30	O	TBC ON Ⓛ	59	–	GND
13	I	CLK INPUT	31	–	—	60	I	EE DATA IN
14	O	DATA OUT	32	O	EDIT (H)	61	O	EE DATA OUT
15	I	DATA IN	33	I	TEST SIGNAL (H)	62	O	EE CLK
16, 17	–	—	34	I	OSD SECAM (H)	63	O	EE CS
18	–	GND	35	O	INSIDE (H)	64	I	REC/P1/P2
19	I	RESET (L)	36	I	SERCH MUTE OK (H)			

4-4. AUDIO SECTION IN MAIN & SUB AUDIO PACK SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MO
BIAS CURR.
TP4002
TL35
TP4003
TL34
P4001
TO A/C HEAD P1501
P1501-6 A.ERASE HEAD
P1501-5 GND
P1501-4 A.HEAD (R)
P1501-3 A.HEAD (W)
P1501-2 CTL HEAD (−)
P1501-1 CTL HEAD (+)
R4014 10
P4002
TO VR P6502 (Page: 4-72/C-28)
H.P OUT (R)
H.P OUT (L)
GND (H.P)
PICTURE CTL
REC VR (L)
REC VR (C)
REC VR (R)
MIC Ⓗ
REG 12.3V
MIC IN
GND (MIC)
C4001 0.01
R4001 68
R4003 10K
R4002 68
C4002 0.01
R4004 10K
R4020 5600
TP4004 S-CAS
P4003
TO FE HEAD P1509
P1509-1 FULL ERASE HEAD
P1509-2 GND (FE)
TL 4100
1.5dB DOWN
3dB UP
R4015 8200
PP4001
TO PS4001 (Page: 4-58/E-1)
POWER OFF Ⓛ
P.B IN
P.B OUT
LP Ⓗ
A.HEAD (R)
A.HEAD (W)
GND
S-VHS CAS Ⓛ
EE Ⓗ / INSERT Ⓜ
NORMAL REC Ⓛ
R CH Ⓛ
L CH Ⓛ
MODE SEL
MIX Ⓗ
AUDIO OUT (R)
GND
AUDIO OUT (L)
TUNER AUDIO (N)
TL29
TL30
PP4001-5 REC
50Vp-p (5μsec./div)
PP4001-15, 17 REC/PLAY
0.4Vp-p (0.2msec./div)
PP4002
TO PS4002 (Page: 4-58/C-1)
NON SW 12V
AUDIO RFC OUT
UNREG −8V
TUNER AUDIO (R)
FM MUTE Ⓗ
TUNER AUDIO (L)
FM INPUT SEL A
AV3 AUDIO IN (R)
FM INPUT SEL B
AV3 AUDIO IN (L)
GND
MIC IN
MIC IN
PP4002-7 REC/PLAY
0.5Vp-p (0.2msec./div)
R4036 39K
R4034 39K
C4011 1200P
C4012 1200P
PP4003
TO PS4003 (Page: 4-58/B-1)
REC VR (R)
REC VR (C)
REC VR (L)
AUDIO IN (R)
MIC Ⓗ
AUDIO IN (L)
RF OUT
TRICK Ⓛ
AUDIO +5V
GND
AUDIO −5V
A.H. SW
GND
REC IN
PAL Ⓛ
(GND)
GND
TL43
TL28
R4035 0
R4033 0
R4010 43K
C4005 0.01
R4009 4700
TP4501
TP4511 A.H.SW
PP4003-8 PLAY
1.8Vp-p (10msec./div)
PP4003-13 PLAY
5.0Vp-p (10msec./div)
PP4003-15 REC
0.1Vp-p (0.2μsec./div)
Hi-Fi AUDIO PACK C.B.A. (VEP04447E)
(A15)
C4003 16V10
R4006 10K
R4005 10K
IC4001
NJM4565DD
VDD
VSS
R4007 10K
R4008 10K
C4004 16V10
QR4004
MRN1404
(POWER OFF Ⓗ : ON)
47K
R4013 6800
R4012 2700
C4010 2200P
R4011 1500
QR4002
DTC363EK
(LEVEL DOWN Ⓗ : ON)
6800
QR4003
DTC363EK
(AUDIO MUTE Ⓗ : ON)
L4002 100μ
L4001 100μ
C4008 0.22
C4009 16V 100
C4006 0.22
C4007 16V100
R4030 10K
R4029 10K
QR4005
MRN1404
(A.DUB Ⓗ : ON)
QR4001
MRN1403
(PAL : ON)
22K
BIAS
VR4002 200KB
PP4501
FULL ERASE HEAD
GND (FE)
BIAS
A.ERASE HEAD
GND
REEL +B
S-VHS CAS Ⓛ
S.TAB 12V
REG 12.3V
D.A.REC Ⓗ
FULL ERASE Ⓗ
SAFETY TAB
PICTURE CTL OUT
PICTURE CTL IN
TRACKING ENV.
AI TRIG Ⓗ
S-VHS Ⓗ
LP Ⓗ
LEVEL DOWN Ⓗ
MODE SEL
AUDIO MUTE Ⓗ
FM MUTE Ⓗ
NORMAL REC Ⓛ
SAFETE TAB
L CH Ⓛ
R CH Ⓛ
S-VHS CAS Ⓛ
NTSC Ⓛ
TRICK Ⓛ
METER (L)
METER (R)
INSERT Ⓛ
MIX Ⓗ
FULL ERASE Ⓗ
CTL HEAD (+)
CTL HEAD (−)
POWER OFF Ⓗ
A.H. SW
D.A.REC Ⓗ
A.DUB Ⓗ
REEL +B
AI TRIG Ⓗ
TRACKING ENV.
D4004 1SS254
R4022 27K
R4028 2200
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-6 /F-7)
S-VHS Ⓗ
UNREG −8V
NON SW 12V
REG 12.3V
FM INPUT SEL B
FM INPUT SEL A
V.EE Ⓗ
AUDIO RFC OUT
AUDIO OUT (R)
AUDIO OUT (L)
GND
AUDIO IN (R)
AUDIO IN (L)
TUNER AUDIO (R)
TUNER AUDIO (L)
TUNER AUDIO (N)
AUDIO +5V
AUDIO −5V
SEL MUTE Ⓗ
AV3 AUDIO IN (R)
AV3 AUDIO IN (L)
A.REC IN
A.RF OUT
A.H SW
S.TAB 12V
PICTURE CTL
R4021 33K
D4003 MA723
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-17/B-22)
PS4701
FULL ERASE HEAD
GND (FE)
BIAS
A.ERASE HEAD
GND
REEL +B
S-VHS CAS Ⓛ
S.TAB 12V
REG 12.3V
D.A.REC Ⓗ
FULL ERASE Ⓗ
SAFETE TAB
PICTURE CTL OUT
PICTURE CTL IN
TRACKING ENV
AI TRIG Ⓗ
S-VHS Ⓗ
C4701 180P (500V)
R4711 22K
D4703 1SS254
R4726 10K
(AG-4700E ONLY)
Q4707-C REC
25Vp-p (5μsec./div)
Q4701-C REC
20Vp-p (5μsec./div)
IC4702
MN4066BS
VCC
R4725 47K
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

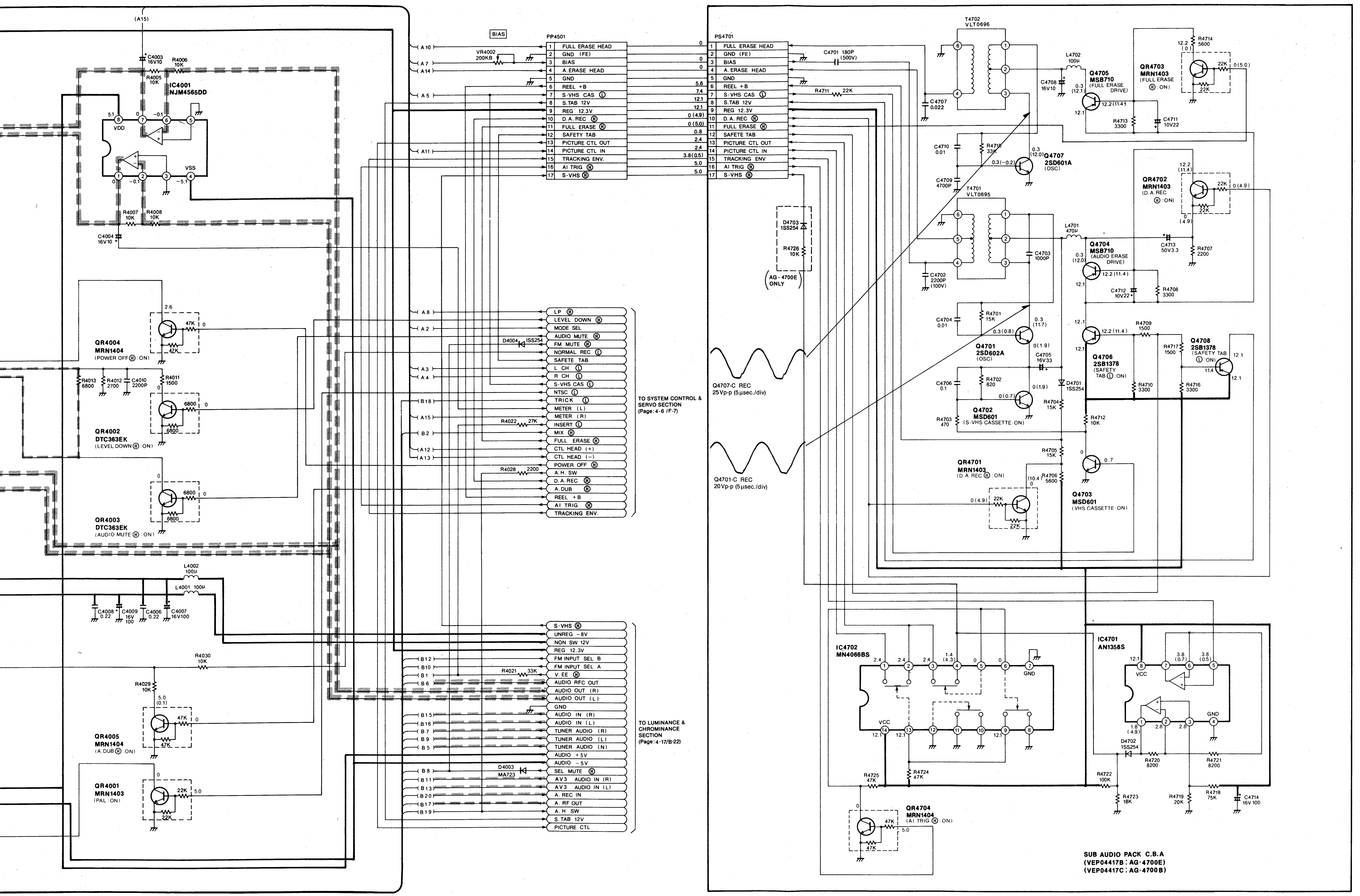
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

• LINE IN SIGNAL L

K SCHEMATIC DIAGRAM

MAIN SIGNAL PATH IN REC MODE MAIN SIGNAL PATH IN PLAYBACK MODE


(A15)
C4003 16V10
R4006 10K
R4005 10K
IC4001 NJM4565DD
VDD
VSS
R4007 10K
R4008 10K
C4004 16V10
(A10)
(A7)
(A14)
(A5)
(A11)
BIAS
VR4002 200KB
PP4501
FULL ERASE HEAD
GND (FE)
BIAS
A.ERASE HEAD
GND
REEL +B
S-VHS CAS Ⓛ
S.TAB 12V
REG 12.3V
D.A.REC Ⓗ
FULL ERASE Ⓗ
SAFETY TAB
PICTURE CTL OUT
PICTURE CTL IN
TRACKING ENV.
AI TRIG Ⓗ
S-VHS Ⓗ
PS4701
C4701 180P (500V)
R4711 22K
QR4004 MRN1404 (POWER OFF Ⓗ : ON)
R4013 6800
R4012 2700
C4010 2200P
R4011 1500
QR4002 DTC363EK (LEVEL DOWN Ⓗ : ON)
QR4003 DTC363EK (AUDIO MUTE Ⓗ : ON)
(A8)
(A2)
(A3)
(A4)
(B18)
(A15)
(B2)
(A12)
(A13)
D4004 1SS254
R4022 27K
R4028 2200
LP Ⓗ
LEVEL DOWN Ⓗ
MODE SEL
AUDIO MUTE Ⓗ
FM MUTE Ⓗ
NORMAL REC Ⓛ
SAFETE TAB
L CH Ⓛ
R CH Ⓛ
S-VHS CAS Ⓛ
NTSC Ⓛ
TRICK Ⓛ
METER (L)
METER (R)
INSERT Ⓛ
MIX Ⓗ
FULL ERASE Ⓗ
CTL HEAD (+)
CTL HEAD (−)
POWER OFF Ⓗ
A.H. SW
D.A.REC Ⓗ
A.DUB Ⓗ
REEL +B
AI TRIG Ⓗ
TRACKING ENV.
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-6 / F-7)
L4002 100μ
L4001 100μ
C4008 0.22
C4009 16V 100
C4006 0.22
C4007 16V100
R4030 10K
R4029 10K
QR4005 MRN1404 (A.DUB Ⓗ : ON)
QR4001 MRN1403 (PAL : ON)
(B12)
(B10)
(B1)
(B6)
(B15)
(B16)
(B7)
(B9)
(B5)
(B8)
(B11)
(B13)
(B20)
(B17)
(B19)
R4021 33K
D4003 MA723
S-VHS Ⓗ
UNREG −8V
NON SW 12V
REG 12.3V
FM INPUT SEL B
FM INPUT SEL A
V. EE Ⓗ
AUDIO RFC OUT
AUDIO OUT (R)
AUDIO OUT (L)
GND
AUDIO IN (R)
AUDIO IN (L)
TUNER AUDIO (R)
TUNER AUDIO (L)
TUNER AUDIO (N)
AUDIO +5V
AUDIO −5V
SEL MUTE Ⓗ
AV3 AUDIO IN (R)
AV3 AUDIO IN (L)
A. REC IN
A. RF OUT
A. H SW
S.TAB 12V
PICTURE CTL
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-17 / B-22)
D4703 1SS254
R4726 10K
(AG-4700E ONLY)
Q4707-C REC 25Vp-p (5μsec./div)
Q4701-C REC 20Vp-p (5μsec./div)
T4702 VLT0696
C4707 0.022
L4702 100μ
C4708 16V10
Q4705 MSB710 (FULL ERASE DRIVE)
QR4703 MRN1403 (FULL ERASE Ⓗ : ON)
R4714 5600
R4713 3300
C4711 10V22
C4710 0.01
R4718 33K
C4709 4700P
Q4707 2SD601A (OSC)
T4701 VLT0695
QR4702 MRN1403 (D.A.REC Ⓗ : ON)
L4701 470μ
C4703 1000P
C4702 2200P (100V)
Q4704 MSB710 (AUDIO ERASE DRIVE)
C4713 50V3.3
R4707 2200
C4712 10V22
R4708 3300
C4704 0.01
R4701 15K
Q4701 2SD602A (OSC)
C4705 16V33
R4709 1500
R4717 1500
Q4708 2SB1378 (SAFETY TAB Ⓛ : ON)
Q4706 2SB1378 (SAFETY TAB Ⓛ : ON)
C4706 0.1
R4702 820
D4701 1SS254
R4704 15K
R4710 3300
R4716 3300
Q4702 MSD601 (S-VHS CASSETTE : ON)
R4703 470
R4712 10K
R4705 15K
R4706 5600
QR4701 MRN1403 (D.A.REC Ⓗ : ON)
Q4703 MSD601 (VHS CASSETTE : ON)
IC4702 MN4066BS
VCC
GND
R4725 47K
R4724 47K
QR4704 MRN1404 (AI TRIG Ⓗ : ON)
IC4701 AN1358S
D4702 1SS254
R4722 100K
R4720 8200
R4721 8200
R4723 18K
R4719 20K
R4718 75K
C4714 16V 100
SUB AUDIO PACK C.B.A
(VEP04417B : AG-4700E)
(VEP04417C : AG-4700B)

OTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

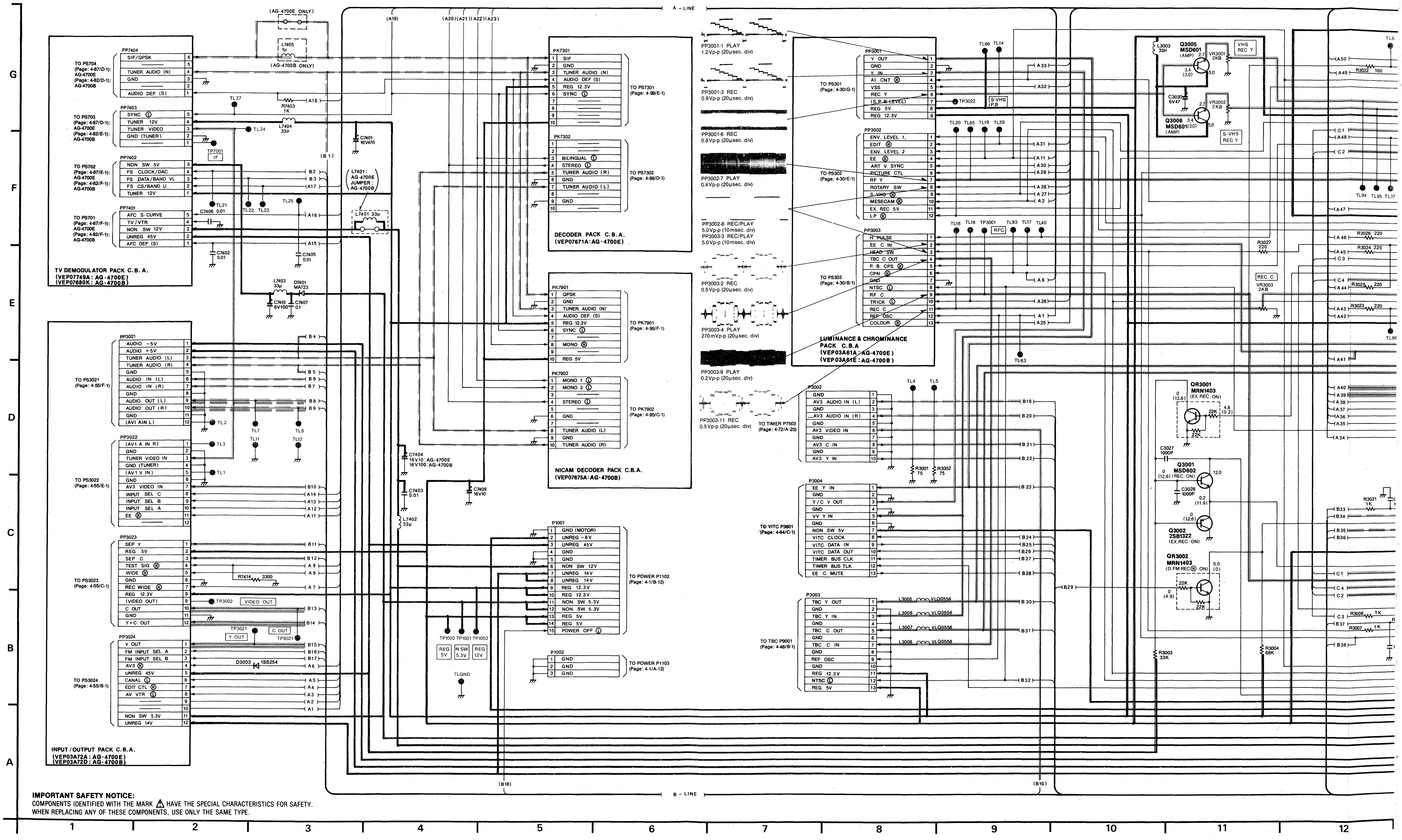
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

• LINE IN SIGNAL LEVEL… −10dB 1kHz

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

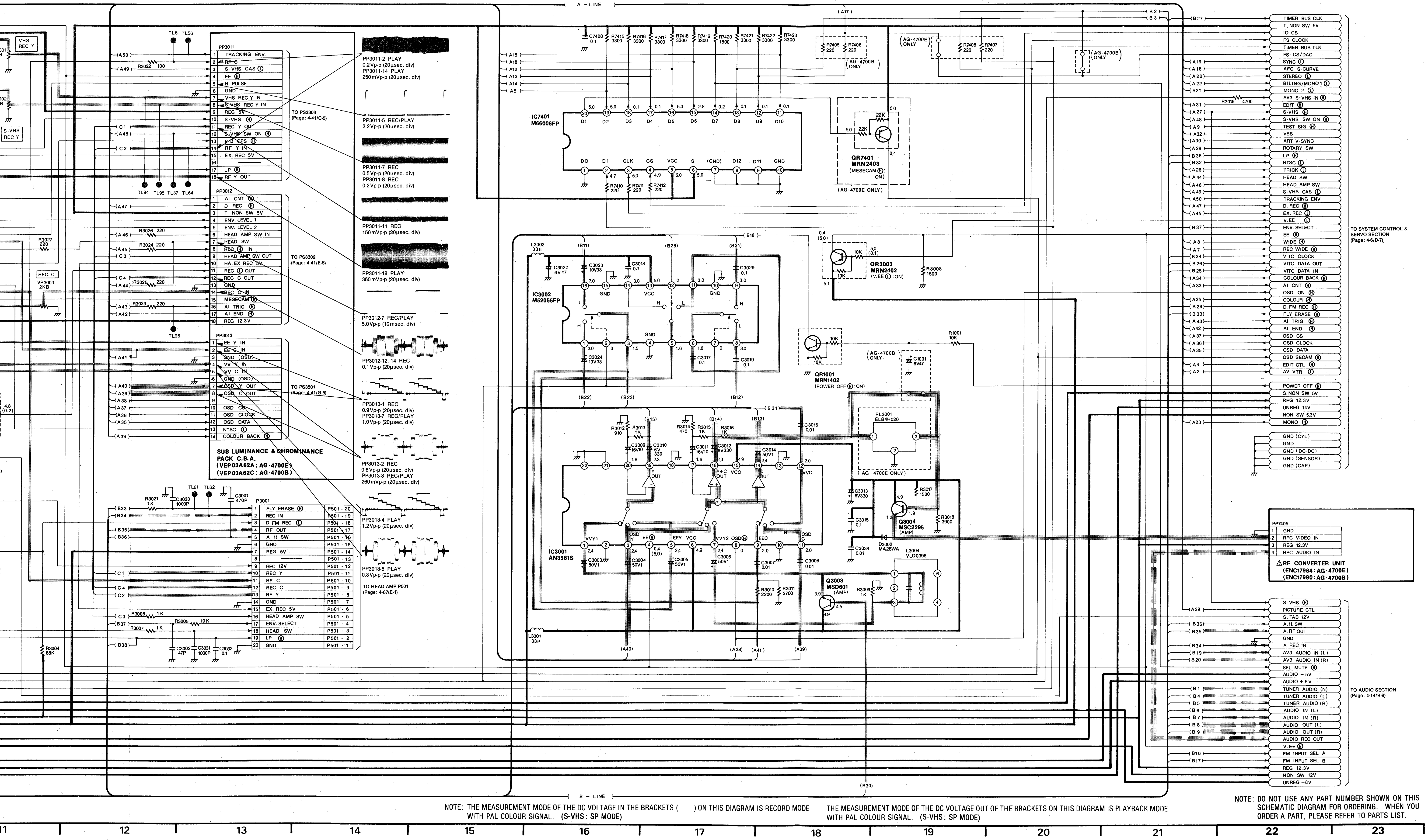
5 6 7 8 9 10 11 12 13 14

4-5. LUMINANCE & CHROMINANCE SECTION IN MAIN SCHEMATIC DIAGRAM


TV DEMODULATOR PACK C.B.A.
(VEP07749A: AG-4700E)
(VEP07680K: AG-4700B)
PP7404
SIF/QPSK
TUNER AUDIO (N)
GND
AUDIO DEF (S)
TO PS704
PP7403
SYNC
TUNER 12V
TUNER VIDEO
GND (TUNER)
TO PS703
PP7402
NON SW 5V
FS CLOCK/DAC
FS DATA/BAND VL
FS CS/BAND U
TUNER 12V
TO PS702
PP7401
AFC S-CURVE
TV/VTR
NON SW 12V
UNREG 45V
AFC DEF (S)
TO PS701
(AG-4700E ONLY)
L7405 1μ
(AG-4700B ONLY)
R7403 1K
L7404 33μ
C7401 16V470
L7401: AG-4700E JUMPER: AG-4700B
L7401 33μ
C7406 0.01
C7402 0.01
C7405 0.01
L7403 33μ
D7401 MA723
C7410 6V100
C7407 0.1
TP7001 IF
TL27
TL24
TL21
TL22
TL23
TL25
INPUT/OUTPUT PACK C.B.A.
(VEP03A72A: AG-4700E)
(VEP03A72D: AG-4700B)
PP3021
AUDIO -5V
AUDIO +5V
TUNER AUDIO (L)
TUNER AUDIO (R)
AUDIO IN (L)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO OUT (R)
(AVI AIN L)
TO PS3021
PP3022
(AV1 A IN R)
TUNER VIDEO IN
GND (TUNER)
(AV1 V IN)
AV3 VIDEO IN
INPUT SEL C
INPUT SEL B
INPUT SEL A
EE
TO PS3022
PP3023
SEP Y
REG 5V
SEP C
TEST SIG
WIDE
REC WIDE
REG 12.3V
(VIDEO OUT)
C OUT
Y+C OUT
TO PS3023
R7414 3300
TP3002 VIDEO OUT
TP3021 Y OUT
C OUT
TP8021
PP3024
Y OUT
FM INPUT SEL A
FM INPUT SEL B
AV3
UNREG 45V
CANAL
EDIT CTL
AV VTR
NON SW 5.3V
UNREG 14V
TO PS3024
D3003 1SS254
C7404 16V10: AG-4700E 16V100: AG-4700B
C7403 0.01
L7402 33μ
C7409 16V10
DECODER PACK C.B.A.
(VEP07671A: AG-4700E)
PK7301
SIF
TUNER AUDIO (N)
AUDIO DEF (S)
REG 12.3V
SYNC
TO PS7301
PK7302
BILINGUAL
STEREO
TUNER AUDIO (R)
TUNER AUDIO (L)
TO PS7302
NICAM DECODER PACK C.B.A.
(VEP07675A: AG-4700B)
PK7901
QPSK
TUNER AUDIO (N)
AUDIO DEF. (S)
REG 12.3V
SYNC
MONO
REG 5V
TO PK7901
PK7902
MONO 1
MONO 2
STEREO
TUNER AUDIO (L)
TUNER AUDIO (R)
TO PK7902
P1001
GND (MOTOR)
UNREG -8V
UNREG 45V
NON SW 12V
UNREG 14V
REG 12.3V
NON SW 5.3V
REG 5V
POWER OFF
TO POWER P1102
P1002
TO POWER P1103
TP1003 TP1001 TP1002
REG 5V
N.SW 5.3V
REG 12V
TLGND
A - LINE
B - LINE
PP3001-1 PLAY 1.2Vp-p (20μsec. div)
PP3001-3 REC 0.9Vp-p (20μsec. div)
PP3001-6 REC 0.8Vp-p (20μsec. div)
PP3002-7 PLAY 0.4Vp-p (20μsec. div)
PP3002-8 REC/PLAY 5.0Vp-p (10msec. div)
PP3003-3 REC/PLAY 5.0Vp-p (10msec. div)
PP3003-2 REC 0.5Vp-p (20μsec. div)
PP3003-4 PLAY 270mVp-p (20μsec. div)
PP3003-9 PLAY 0.2Vp-p (20μsec. div)
PP3003-11 REC 0.5Vp-p (20μsec. div)
LUMINANCE & CHROMINANCE PACK C.B.A
(VEP03A61A: AG-4700E)
(VEP03A61E: AG-4700B)
PP3001
Y OUT
Y IN
AI CNT
VSS
REC Y
(S.P.B LEVEL)
REG 5V
REG 12.3V
TO PS301
PP3002
ENV. LEVEL 1
EDIT
ENV. LEVEL 2
EE
ART V SYNC
PICTURE CTL
RF Y
ROTARY SW
S-VHS
MESECAM
EX. REC 5V
LP
TO PS302
PP3003
H PULSE
EE C IN
HEAD SW
TBC C OUT
P.B CPS
CPN
NTSC
RF C
TRICK
REC C
REF OSC
COLOUR
TO PS303
TP3022
S-VHS P.B
TL66 TL14
TL20 TL65 TL19 TL39
TL18 TL16 TP3001 TL93 TL17 TL40
RFC
TL63
TL4 TL5
P3002
AV3 AUDIO IN (L)
AV3 AUDIO IN (R)
AV3 VIDEO IN
AV3 C IN
AV3 Y IN
TO TIMER P7503
R3001 75
R3002 75
P3004
EE Y IN
Y/C Y OUT
VV Y IN
NON SW 5V
VITC CLOCK
VITC DATA IN
VITC DATA OUT
TIMER BUS CLK
TIMER BUS TLK
EE C MUTE
TO VITC P3801
P3003
TBC Y OUT
TBC Y IN
TBC C OUT
TBC C IN
REF OSC
REG 12.3V
NTSC
REG 5V
TO TBC P9001
L3005 VLQ0556
L3006 VLQ0556
L3007 VLQ0556
L3008 VLQ0556
L3003 33μ
Q3005 MSD601 (AMP)
VR3001 2KB
VHS REC Y
C3030 6V47
Q3006 MSD601 (AMP)
VR3002 2KB
S-VHS REC Y
R3027 220
REC. C
VR3003 2KB
QR3001 MRN1403 (EX.REC: ON)
C3027 1000P
Q3001 MSD602 (REC: ON)
C3028 1000P
Q3002 2SB1322 (EX.REC: ON)
QR3002 MRN1403 (D.FM REC: ON)
R3003 33K
R3004 68K
R3022 100
R3026 220
R3024 220
R3025 220
R3023 220
R3021 1K
R3006 1K
R3007 1K
TL6
TL94 TL95 TL37
TL96
A B C D E F G
1 2 3 4 5 6 7 8 9 10 11 12

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


A - LINE
B - LINE
IC7401
M66006FP
QR7401
MRN2403
(MESECAM Ⓗ: ON)
(AG-4700E ONLY)
(AG-4700B ONLY)
(AG-4700E ONLY)
IC3002
M52055FP
QR3003
MRN2402
(V.EE Ⓛ:ON)
QR1001
MRN1402
(POWER OFF Ⓗ:ON)
FL3001
ELB4H020
(AG-4700E ONLY)
Q3004
MSC2295
(AMP)
D3002
MA28WA
L3004
VLQ0398
Q3003
MSD601
(AMP)
IC3001
AN3581S
PP3011
TRACKING ENV.
RF C
S-VHS CAS Ⓛ
EE Ⓗ
H PULSE
GND
VHS REC Y IN
S-VHS REC Y IN
REG 5V
S-VHS Ⓗ
REC Y OUT
S-VHS SW ON Ⓗ
B-B CPS Ⓗ
RF Y IN
EX. REC 5V
LP Ⓗ
RF Y OUT
TO PS3303 (Page: 4-41/C-5)
PP3012
AI CNT Ⓗ
D REC Ⓗ
T NON SW 5V
ENV. LEVEL 1
ENV. LEVEL 2
HEAD AMP SW IN
HEAD SW
REC Ⓗ IN
HEAD AMP SW OUT
HA. EX REC 5V
REC Ⓗ OUT
REC C OUT
GND
REC C IN
MESECAM Ⓗ
AI TRIG Ⓗ
AI END Ⓗ
REG 12.3V
TO PS3302 (Page: 4-41/E-5)
PP3013
EE Y IN
EE C IN
GND (OSD)
VV Y IN
VV C IN
GND (OSD)
OSD Y OUT
OSD C OUT
OSD CS
OSD CLOCK
OSD DATA
NTSC Ⓛ
COLOUR BACK Ⓗ
TO PS3501 (Page: 4-41/G-5)
SUB LUMINANCE & CHROMINANCE PACK C.B.A.
(VEP03A62A: AG-4700E)
(VEP03A62C: AG-4700B)
PP3011-2 PLAY 0.2Vp-p (20μsec. div)
PP3011-14 PLAY 250mVp-p (20μsec. div)
PP3011-5 REC/PLAY 2.2Vp-p (20μsec. div)
PP3011-7 REC 0.5Vp-p (20μsec. div)
PP3011-8 REC 0.2Vp-p (20μsec. div)
PP3011-11 REC 150mVp-p (20μsec. div)
PP3011-18 PLAY 350mVp-p (20μsec. div)
PP3012-7 REC/PLAY 5.0Vp-p (10msec. div)
PP3012-12, 14 REC 0.1Vp-p (20μsec. div)
PP3013-1 REC 0.9Vp-p (20μsec. div)
PP3013-7 REC/PLAY 1.0Vp-p (20μsec. div)
PP3013-2 REC 0.6Vp-p (20μsec. div)
PP3013-8 REC/PLAY 260mVp-p (20μsec. div)
PP3013-4 PLAY 1.2Vp-p (20μsec. div)
PP3013-5 PLAY 0.3Vp-p (20μsec. div)
P3001
FLY ERASE Ⓗ
REC IN
D FM REC Ⓛ
RF OUT
A H SW
GND
REG 5V
REC 12V
REC Y
RF C
REC C
RF Y
GND
EX. REC 5V
HEAD AMP SW
ENV. SELECT
HEAD SW
LP Ⓗ
GND
TO HEAD AMP P501 (Page: 4-67/E-1)
TIMER BUS CLK
T. NON SW 5V
IO CS
FS CLOCK
TIMER BUS TLK
FS CS/DAC
SYNC Ⓛ
AFC S-CURVE
STEREO Ⓛ
BILING/MONO1 Ⓛ
MONO 2 Ⓛ
AV3 S-VHS IN Ⓗ
EDIT Ⓗ
S-VHS Ⓗ
S-VHS SW ON Ⓗ
TEST SIG Ⓗ
VSS
ART V-SYNC
ROTARY SW
LP Ⓗ
NTSC Ⓛ
TRICK Ⓛ
HEAD SW
HEAD AMP SW
S-VHS CAS Ⓛ
TRACKING ENV
D. REC Ⓗ
EX. REC Ⓛ
V. EE Ⓛ
ENV. SELECT
EE Ⓗ
WIDE Ⓗ
REC WIDE Ⓗ
VITC CLOCK
VITC DATA OUT
VITC DATA IN
COLOUR BACK Ⓗ
AI CNT Ⓗ
OSD ON Ⓗ
COLOUR Ⓗ
D. FM REC Ⓗ
FLY ERASE Ⓗ
AI TRIG Ⓗ
AI END Ⓗ
OSD CS
OSD CLOCK
OSD DATA
OSD SECAM Ⓗ
EDIT CTL Ⓗ
AV VTR Ⓛ
POWER OFF Ⓗ
S.NON SW 5V
REG 12.3V
UNREG 14V
NON SW 5.3V
MONO Ⓗ
GND (CYL)
GND
GND (DC-DC)
GND (SENSOR)
GND (CAP)
TO SYSTEM CONTROL & SERVO SECTION (Page: 4-6/D-7)
PP7405
GND
RFC VIDEO IN
REG 12.3V
RFC AUDIO IN
⚠RF CONVERTER UNIT
(ENC17984: AG-4700E)
(ENC17990: AG-4700B)
S-VHS Ⓗ
PICTURE CTL
S. TAB 12V
A.H. SW
A. RF OUT
GND
A. REC IN
AV3 AUDIO IN (L)
AV3 AUDIO IN (R)
SEL MUTE Ⓗ
AUDIO -5V
AUDIO +5V
TUNER AUDIO (N)
TUNER AUDIO (L)
TUNER AUDIO (R)
AUDIO IN (L)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO OUT (R)
AUDIO REC OUT
V.EE Ⓗ
FM INPUT SEL A
FM INPUT SEL B
REG 12.3V
NON SW 12V
UNREG -8V
TO AUDIO SECTION (Page: 4-14/B-9)
11
12
13
14
15
16
17
18
19
20
21
22
23

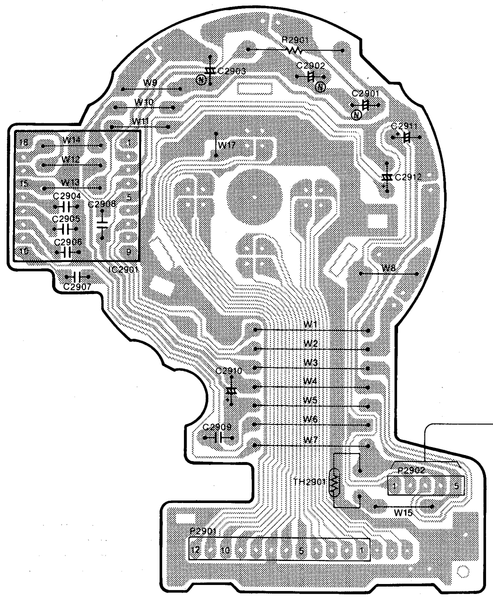
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

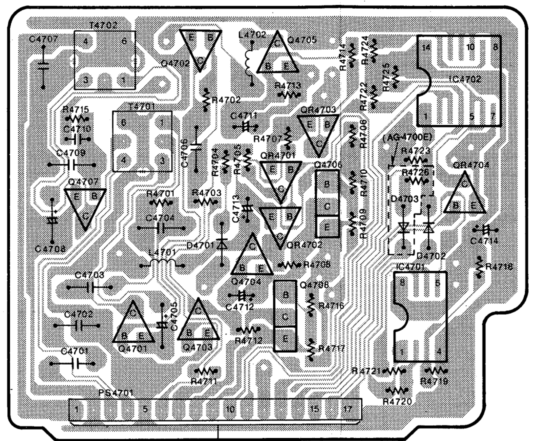
4-6. MAIN C.B.A. (VEP03A37S: AG-4700E) (VEP03A37T: AG-4700B)

H G F E D C B A

CYLINDER DRIVE C.B.A. (VEX0126)

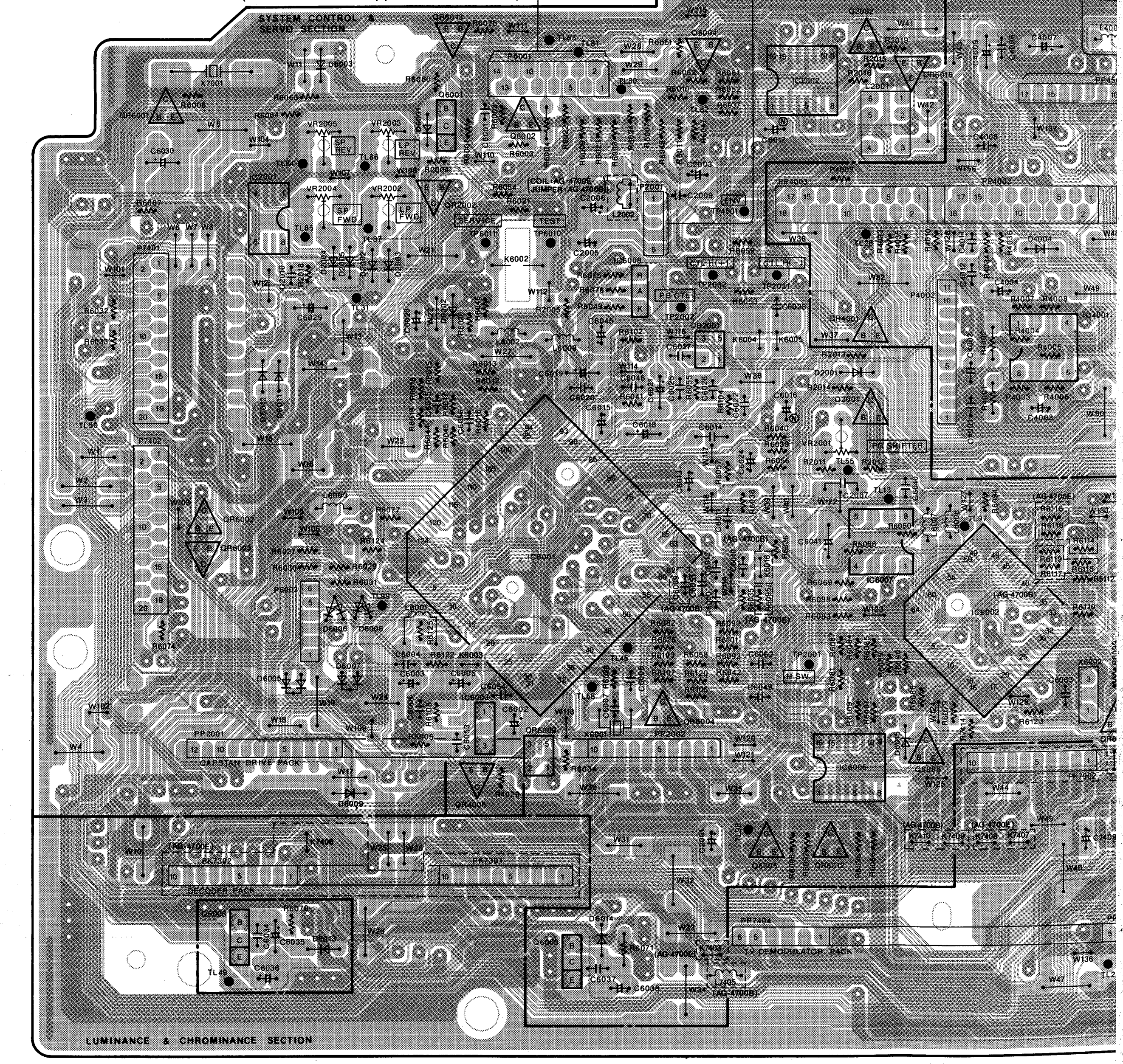

R2901
C2902
C2903
C2901
C2911
C2912
W9
W10
W11
W12
W13
W14
W17
C2904
C2905
C2906
C2908
C2907
C2909
C2910
W1
W2
W3
W4
W5
W6
W7
W8
W15
W16
TH2901
P2902
P2901

SUB AUDIO PACK C.B.A. (VEP04417B: AG-4700E) (VEP04417C: AG-4700B)

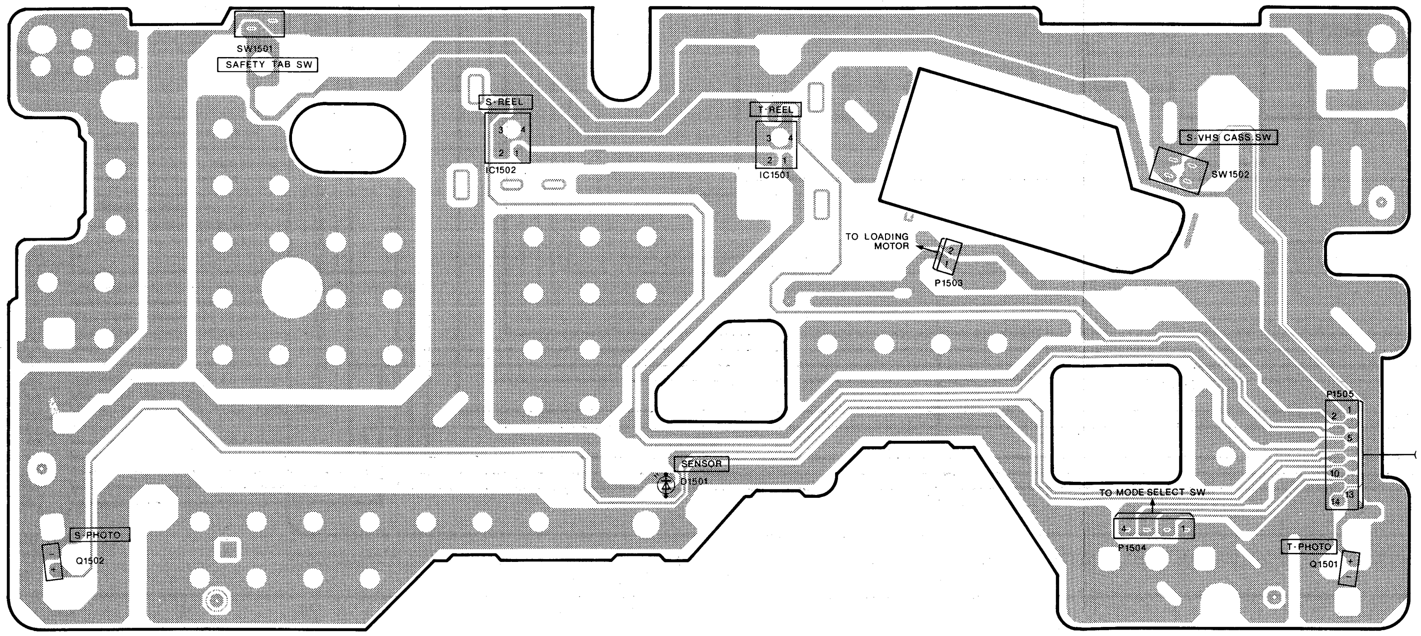

T4702
C4707
L4702
Q4705
Q4702
IC4702
T4701
R4715
C4710
C4709
Q4707
C4708
R4701
R4703
C4704
L4701
C4703
C4702
C4701
Q4701
Q4703
Q4704
Q4706
QR4701
QR4702
QR4703
QR4704
D4701
D4702
D4703
IC4701
R4719
R4720
R4721
R4717
R4716
C4714
(AG-4700E)
PS4701

(B)
(A)

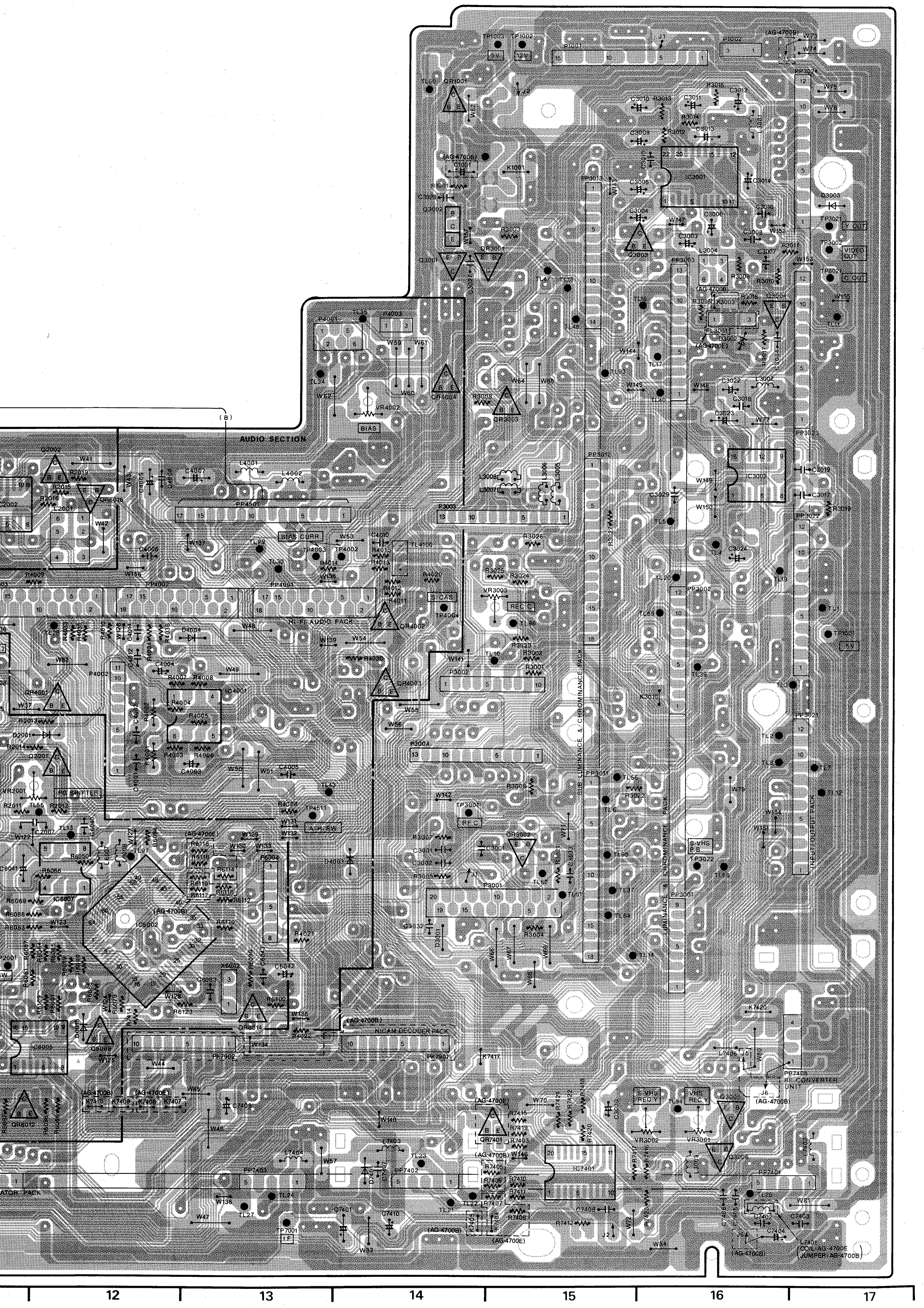
MAIN C.B.A. (VEP03A37S: AG-4700E) (VEP03A37T: AG-4700B)


(C)
(A)
(B)
SYSTEM CONTROL & SERVO SECTION
X7001
SP REV
LP REV
SP FWD
LP FWD
SERVICE
TEST
COIL (AG-4700E) JUMPER (AG-4700B)
K6002
PB CTL
REC CTL
FF CTL
P7401
P7402
RC SWITCH
PP2001
CAPSTAN DRIVE PACK
PP2002
DECODER PACK
PP7404
TV DEMODULATOR PACK
PP4001
LUMINANCE & CHROMINANCE SECTION

MECHANISM CONNECTION C.B.A.


SW1501
SAFETY TAB SW
S-REEL
IC1502
T-REEL
IC1501
S-VHS CASS. SW
SW1502
TO LOADING MOTOR
P1503
SENSOR
D1501
TO MODE SELECT SW
P1504
P1505
(C)
S-PHOTO
Q1502
T-PHOTO
Q1501

1 2 3 4 5 6 7 8 9 10 11 12



MAIN C.B.A. ADDRESS INFORMATION

SYSTEM CONTROL & SERVO Section	
Transistor	
Q1501	A-7
Q1502	A-1
Q2001	D-12
Q2002	F-12
Q6001	E-9
Q6002	E-10
Q6003	A-10
Q6004	F-11
Q6005	B-11
Q6006	B-12
Q6008	A-8
Transistor & Resistor	
QR2001	D-11
QR2002	E-9
QR6001	E-8
QR6002	C-8
QR6003	C-8
QR6004	B-11
QR6009	B-10
QR6012	B-11
QR6013	F-9
QR6014	B-13
QR6015	F-12
Integrated Circuit	
IC1501	C-4
IC1502	C-3
IC2001	E-9
IC2002	F-11
IC2901	F-1
IC6001	C-10
IC6002	C-12
IC6003	B-10
IC6005	B-12
IC6007	C-12
IC6008	E-10
Test Point	
TP2001	C-11
TP2002	D-11
TP2031	E-11
TP2032	E-11
TP6010	E-10
TP6011	E-10
Adjustment	
VR2001	D-12
VR2002	E-9
VR2003	E-9
VR2004	E-9
VR2005	E-9
Connector	
P1503	B-5
P1504	A-6
P1505	B-7
P2001	E-11
P2901	E-2
P2902	E-3
P6001	F-10
P6003	C-9
P6004	C-13
P7401	E-8
P7402	D-8
PP2001	B-8
PP2002	B-11

ADDRESS INFORMATION

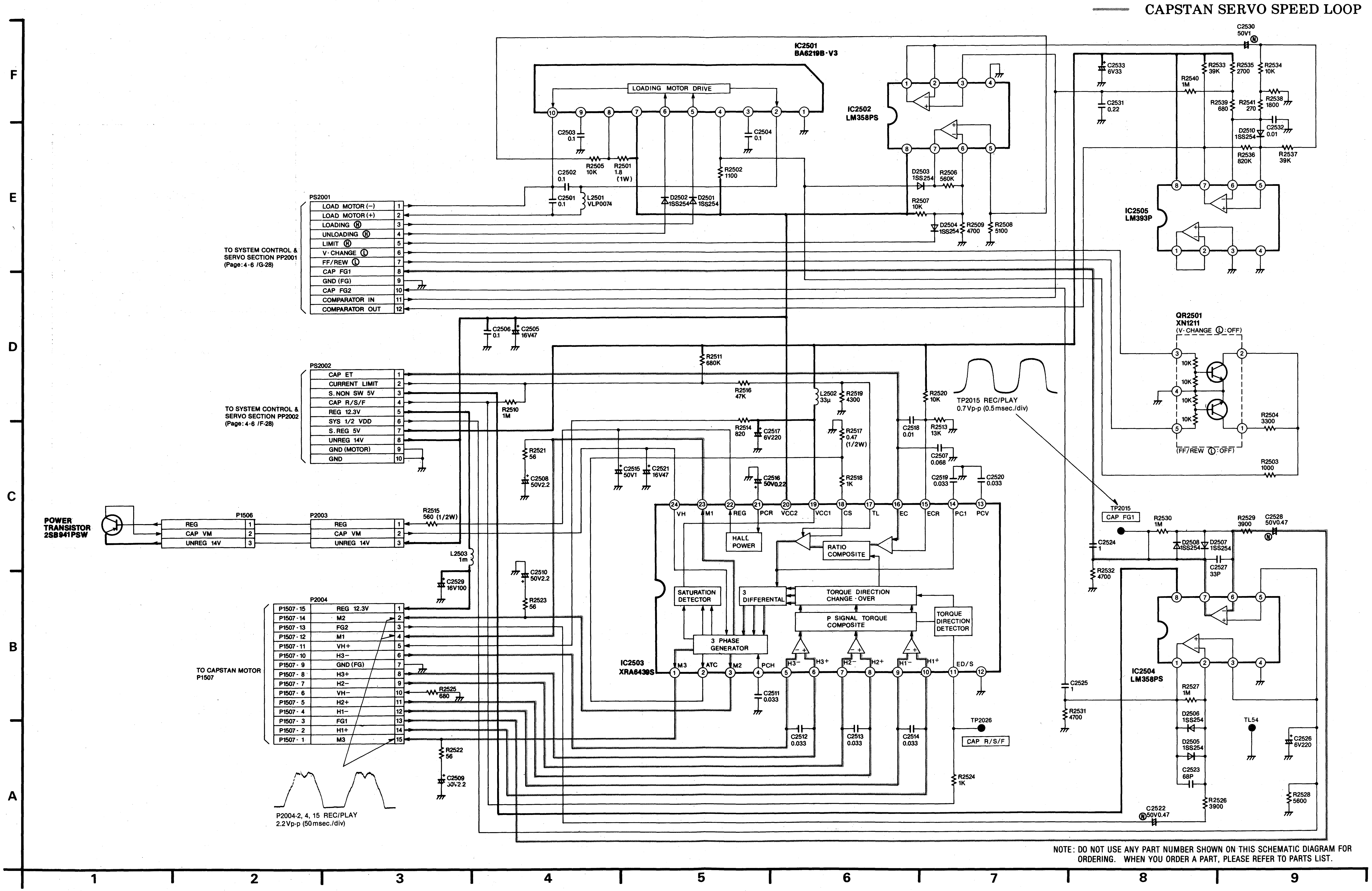
LUMINANCE & CHROMINANCE Section	
Transistor	
Q3001	G-14
Q3002	H-14
Q3003	G-15
Q3004	G-16
Q3005	B-16
Q3006	A-16
Transistor & Resistor	
QR1001	H-14
QR3001	G-15
QR3002	C-15
QR3003	F-15
QR7401	B-15
Integrated Circuit	
IC3001	H-16
IC3002	F-16
IC7401	A-15
Test Point	
TP1001	E-17
TP1002	H-15
TP1003	H-15
TP3001	D-14
TP3002	G-17
TP3021	G-17
TP3022	C-16
TP8021	G-17
Adjustment	
VR3001	B-16
VR3002	B-16
VR3003	E-15
Connector	
P1001	H-15
P1002	H-16
P3001	C-15
P3002	D-14
P3003	F-14
P3004	D-14
PK7301	B-10
PK7302	B-8
PK7901	B-14
PK7902	B-13
PP3001	C-16
PP3002	E-16
PP3003	G-16
PP3011	D-15
PP3012	F-15
PP3013	H-15
PP3021	D-17
PP3022	E-17
PP3023	F-17
PP3024	H-17
PP7401	A-16
PP7402	A-14
PP7403	A-13
PP7404	A-11
PP7405	B-17

ADDRESS INFORMATION

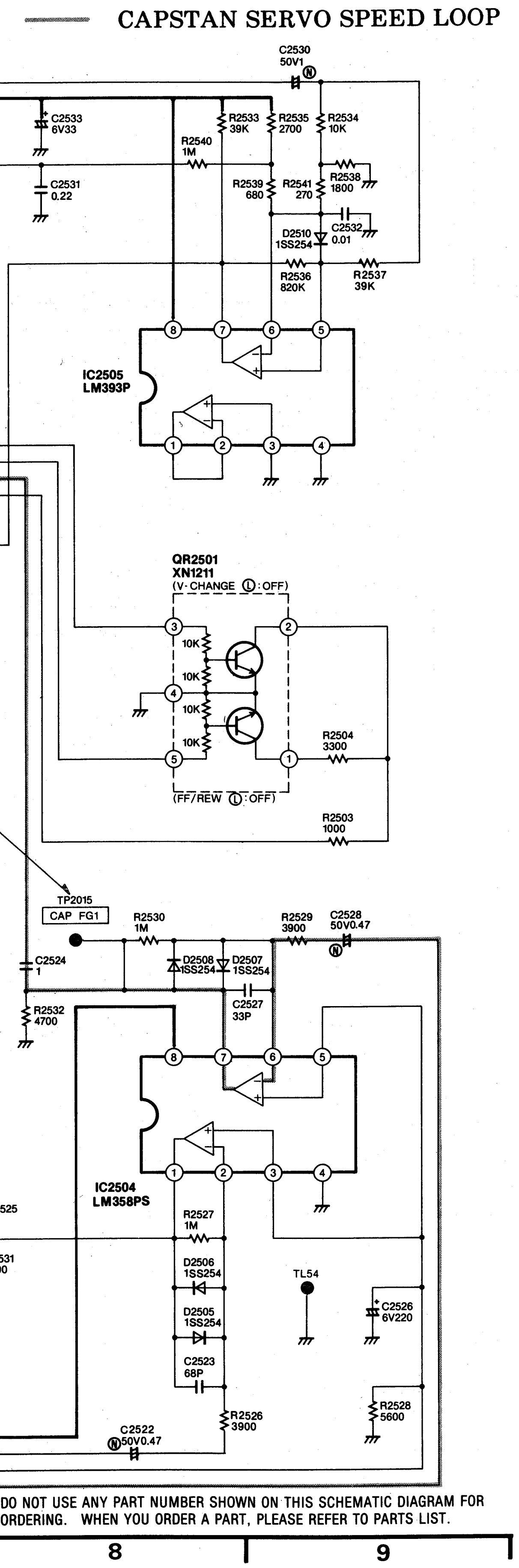
AUDIO Section & SUB AUDIO PACK C.B.A.	
Transistor	
Q4701	F-5
Q4702	G-5
Q4703	F-5
Q4704	F-5
Q4705	G-5
Q4706	F-5
Q4707	F-4
Q4708	F-5
Transistor & Resistor	
QR4001	D-12
QR4002	E-14
QR4003	D-14
QR4004	F-14
QR4005	B-10
QR4701	F-5
QR4702	F-5
QR4703	G-5
QR4704	F-6
Integrated Circuit	
IC4001	D-13
IC4701	F-6
IC4702	G-6
Adjustment	
VR4002	F-14
Test Point	
TP4002	E-14
TP4003	E-13
TP4004	E-14
TP4501	E-11
TP4511	D-13
Connector	
P4001	G-14
P4002	D-12
P4003	G-14
PP4001	E-13
PP4002	E-12
PP4003	E-11
PP4501	F-13
PS4701	E-4

ADDRESS INFORMATION

4-7. CAPSTAN DRIVE PACK SCHEMATIC DIAGRAM


CAPSTAN SERVO SPEED LOOP
IC2501
BA6219B-V3
LOADING MOTOR DRIVE
IC2502
LM358PS
IC2505
LM393P
IC2504
LM358PS
IC2503
XRA6430S
QR2501
XN1211
(V-CHANGE Ⓛ:OFF)
(FF/REW Ⓛ:OFF)
PS2001
LOAD MOTOR (–)
LOAD MOTOR (+)
LOADING Ⓗ
UNLOADING Ⓗ
LIMIT Ⓗ
V-CHANGE Ⓛ
FF/REW Ⓛ
CAP FG1
GND (FG)
CAP FG2
COMPARATOR IN
COMPARATOR OUT
TO SYSTEM CONTROL & SERVO SECTION PP2001 (Page: 4-6 /G-28)
PS2002
CAP ET
CURRENT LIMIT
S.NON SW 5V
CAP R/S/F
REG 12.3V
SYS 1/2 VDD
S.REG 5V
UNREG 14V
GND (MOTOR)
GND
TO SYSTEM CONTROL & SERVO SECTION PP2002 (Page: 4-6 /F-28)
POWER TRANSISTOR 2SB941PSW
P1506
REG
CAP VM
UNREG 14V
P2003
REG
CAP VM
UNREG 14V
P2004
P1507-15 REG 12.3V
P1507-14 M2
P1507-13 FG2
P1507-12 M1
P1507-11 VH+
P1507-10 H3–
P1507-9 GND (FG)
P1507-8 H3+
P1507-7 H2–
P1507-6 VH–
P1507-5 H2+
P1507-4 H1–
P1507-3 FG1
P1507-2 H1+
P1507-1 M3
TO CAPSTAN MOTOR P1507
P2004-2, 4, 15 REC/PLAY 2.2Vp-p (50msec./div)
TP2015 REC/PLAY 0.7Vp-p (0.5msec./div)
TP2015 CAP FG1
TP2026 CAP R/S/F
TL54
VH
M1
REG
PCR
VCC2
VCC1
CS
TL
EC
ECR
PC1
PCV
HALL POWER
RATIO COMPOSITE
SATURATION DETECTOR
3 DIFFERENTIAL
TORQUE DIRECTION CHANGE-OVER
P SIGNAL TORQUE COMPOSITE
TORQUE DIRECTION DETECTOR
3 PHASE GENERATOR
M3
ATC
M2
PCH
H3–
H3+
H2–
H2+
H1–
H1+
ED/S
C2503 0.1
C2504 0.1
C2502 0.1
R2505 10K
R2501 1.8 (1W)
R2502 1100
C2501 0.1
L2501 VLP0074
D2502 1SS254
D2501 1SS254
D2503 1SS254
R2506 560K
R2507 10K
D2504 1SS254
R2509 4700
R2508 5100
C2530 50V1
C2533 6V33
C2531 0.22
R2540 1M
R2533 39K
R2535 2700
R2534 10K
R2539 680
R2541 270
R2538 1800
D2510 1SS254
C2532 0.01
R2536 820K
R2537 39K
C2506 0.1
C2505 16V47
R2511 680K
R2516 47K
L2502 33µ
R2519 4300
R2520 10K
R2510 1M
R2514 820
C2517 6V220
R2517 0.47 (1/2W)
C2518 0.01
R2513 13K
C2507 0.068
R2521 56
C2508 50V2.2
C2515 50V1
C2521 16V47
C2516 50V0.22
R2518 1K
C2519 0.033
C2520 0.033
10K
R2504 3300
R2503 1000
R2515 560 (1/2W)
L2503 1m
C2529 16V100
C2510 50V2.2
R2523 56
R2525 680
C2511 0.033
C2512 0.033
C2513 0.033
C2514 0.033
R2522 56
C2509 50V2.2
R2524 1K
R2530 1M
R2529 3900
C2528 50V0.47
C2524 1
D2508 1SS254
D2507 1SS254
C2527 33P
R2532 4700
C2525 1
R2531 4700
R2527 1M
D2506 1SS254
D2505 1SS254
C2523 68P
R2526 3900
C2522 50V0.47
C2526 6V220
R2528 5600
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


CAPSTAN SERVO SPEED LOOP
C2530 50V1
C2533 6V33
R2533 39K
R2535 2700
R2534 10K
R2540 1M
C2531 0.22
R2539 680
R2541 270
R2538 1800
D2510 1SS254
C2532 0.01
R2536 820K
R2537 39K
IC2505 LM393P
QR2501 XN1211
(V·CHANGE ①:OFF)
10K
(FF/REW ①:OFF)
R2504 3300
R2503 1000
TP2015 CAP FG1
R2530 1M
R2529 3900
C2528 50V0.47
C2524 1
D2508 1SS254
D2507 1SS254
C2527 33P
R2532 4700
IC2504 LM358PS
R2527 1M
D2506 1SS254
D2505 1SS254
C2523 68P
TL54
C2526 6V220
R2526 3900
R2528 5600
C2522 50V0.47
525
531
8
9

DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

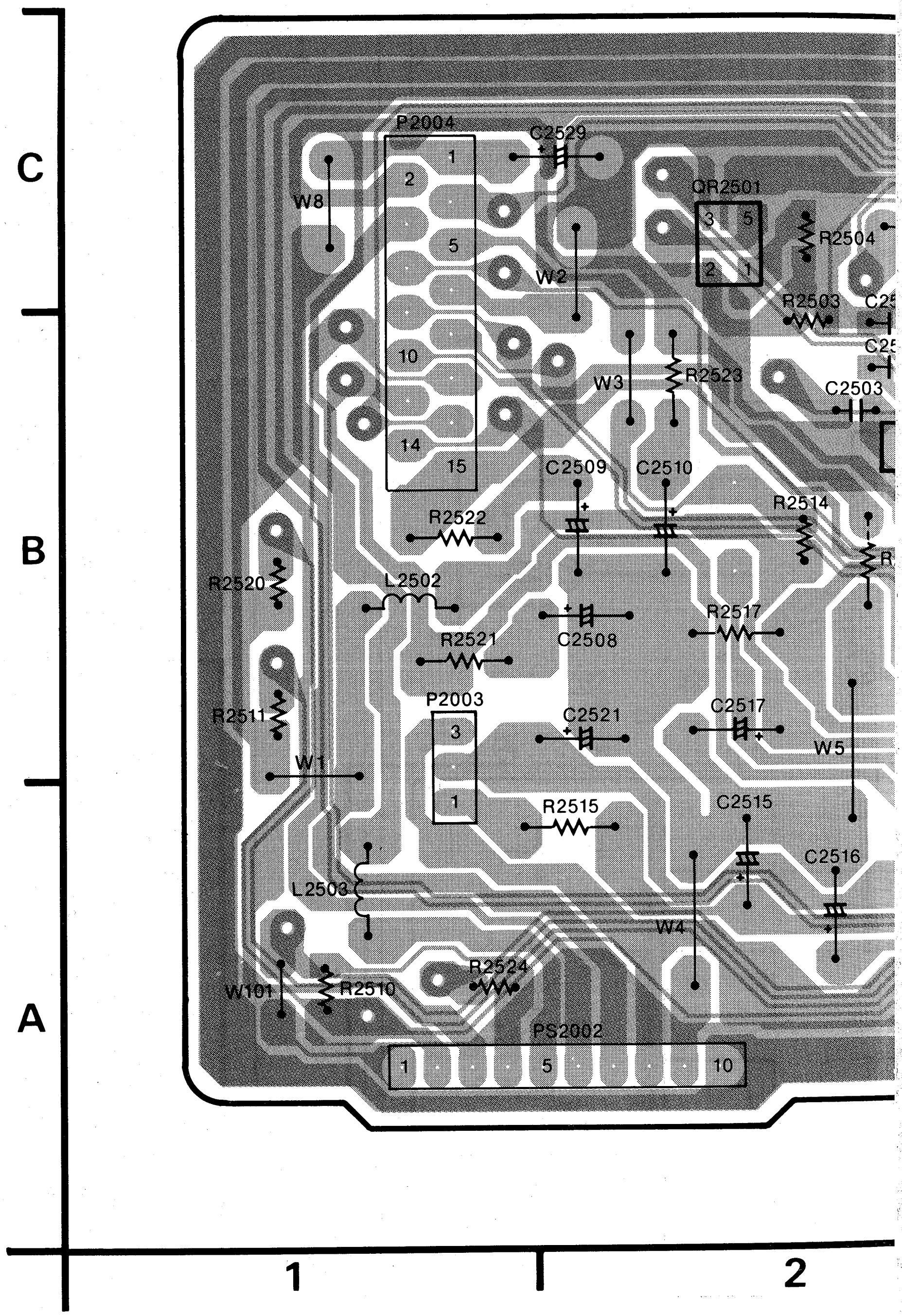
CAPSTAN DRIVE PACK ICs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	IC2501										IC2502									
MODE	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8		
STOP	0	0	0	6.9	0	0	14.4	14.4	0	0	0	0	0	0	4.9	0.7	13.1	14.4		
PLAY	0	0.4	0	6.8	0	0	14.3	14.3	0	0	0	0	0	0	4.8	0.7	13.0	14.3		
REC	0	0.3	0.1	6.8	0	0	14.3	14.3	0	0.1	0	0	0	0	4.8	0.7	13.0	14.3		
F.F	0.1	0	0	14.2	0.1	0.1	14.3	14.3	0	0	0	0	0	0	4.8	0.7	13.7	14.3		
REW	0	0.2	0	14.2	0	0	14.3	14.3	0.1	0	0	0	0	0	4.8	0.7	13.7	14.3		
REF. NO.	IC2503																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	1.1	0	1.1	1.5	2.3	2.4	2.3	2.4	2.4	2.3	2.0	0	1.2	2.6	2.9	1.4	0	0	5.2	14.4
PLAY	3.1	0.1	3.1	1.5	2.4	2.4	2.4	2.4	2.4	2.4	0	0	0.8	0.7	2.9	2.6	0.5	0.1	5.2	14.3
REC	3.1	0.1	3.1	1.5	2.4	2.4	2.4	2.4	2.4	2.4	0	0	0.8	0.7	2.9	2.6	0.5	0.1	5.2	14.3
F.F	7.7	0.2	7.7	1.5	2.4	2.4	0	2.4	2.4	2.4	0	0.1	1.0	0.8	2.9	1.9	0.5	0	5.2	14.3
REW	7.3	0.2	7.3	1.5	2.4	2.4	2.4	2.4	2.4	2.4	5.0	0.1	0.9	0.7	2.9	2.5	0.5	0.2	5.2	14.2
REF. NO.	IC2503																			
MODE	21	22	23	24																
STOP	0.5	13.8	1.1	4.7																
PLAY	2.3	13.1	3.1	4.7																
REC	2.3	13.1	3.1	4.6																
F.F	12.1	5.8	7.3	14.2																
REW	8.0	6.5	7.1	14.2																
REF. NO.	IC2504										IC2505									
MODE	1	2	3	4	5	6	7	8			1	2	3	4	5	6	7	8		
STOP	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0			0	0.5	0.5	0	2.4	2.9	0	5.2		
PLAY	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0			0	0.4	0.4	0	2.4	2.9	0	5.2		
REC	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0			0	0.4	0.4	0	2.4	2.9	0	5.2		
F.F	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0			0	0.4	0.4	0	2.4	2.9	0	5.2		
REW	2.5	2.5	2.5	0	2.5	2.5	2.5	5.0			0	0.4	0.4	0	2.4	2.9	0	5.2		

CAPSTAN DRIVE PACK TRANSISTORs DC VOLTAGE CHART (S-VHS: SP MODE)

REF. NO.	QR2501																	
MODE	1	2	3	4	5													
STOP	0	0.1	4.9	0	4.9													
PLAY	0	0.1	4.9	0	4.9													
REC	0	0.1	4.9	0	4.9													
F.F	14.2	14.2	0	0	0													
REW	14.2	14.2	0	0	0													

4-8. CAPSTAN DRIVE PACK C.B.A. (VEP02412B)

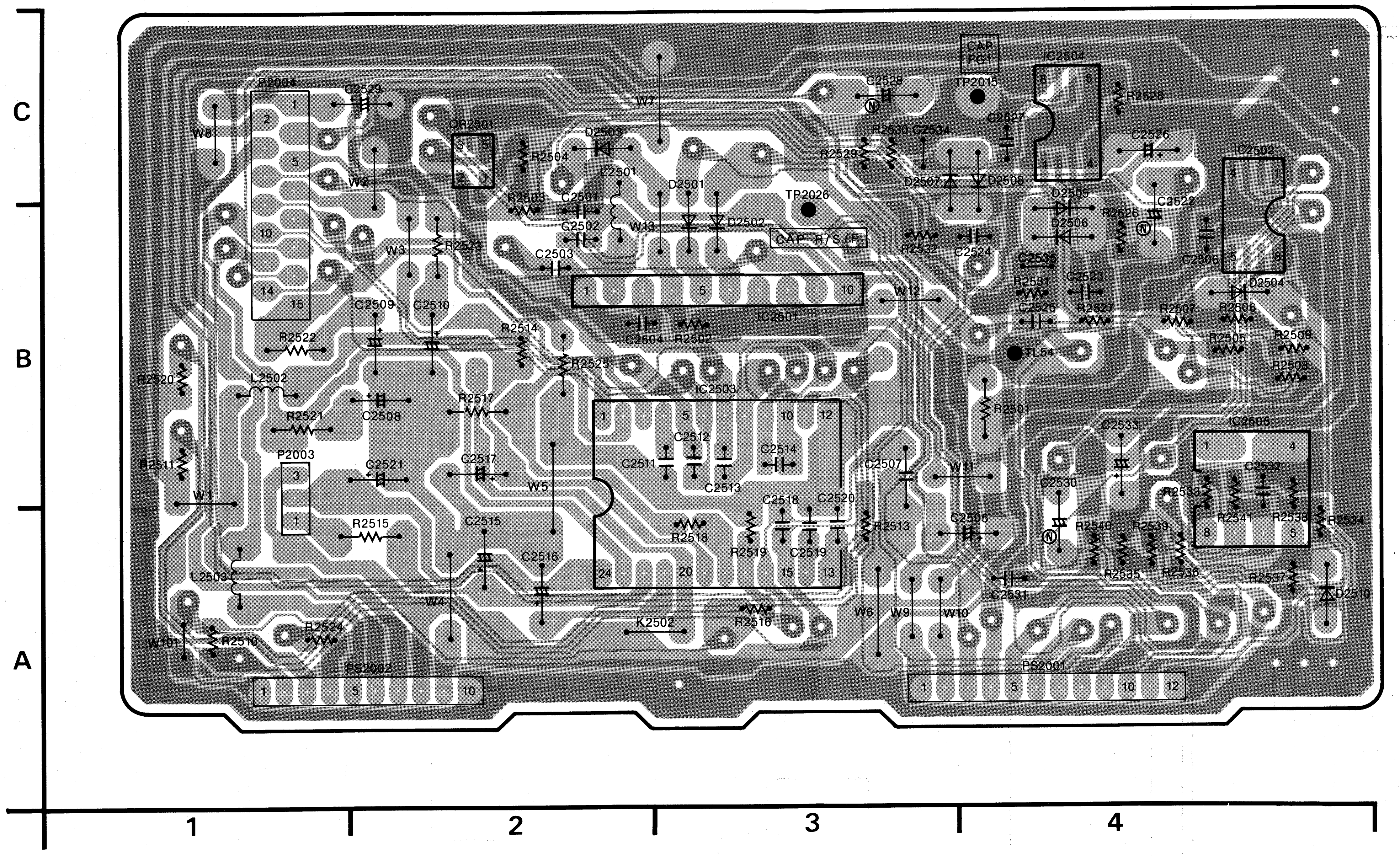

C
B
A
1
2
P2004
C2529
W8
QR2501
R2504
W2
R2503
W3
R2523
C2503
C2509
C2510
R2514
R2522
R2520
L2502
C2508
R2521
R2517
R2511
P2003
C2521
C2517
W5
W1
R2515
C2515
C2516
L2503
W4
W101
R2510
R2524
PS2002
1
5
10
14
15

DE)

8		
14.4		
14.3		
14.3		
14.3		
14.3		
18	19	20
0	5.2	14.4
0.1	5.2	14.3
0.1	5.2	14.3
0	5.2	14.3
0.2	5.2	14.2
8		
5.2		
5.2		
5.2		
5.2		
5.2		

P MODE)

4-8. CAPSTAN DRIVE PACK C.B.A. (VEP02412B)

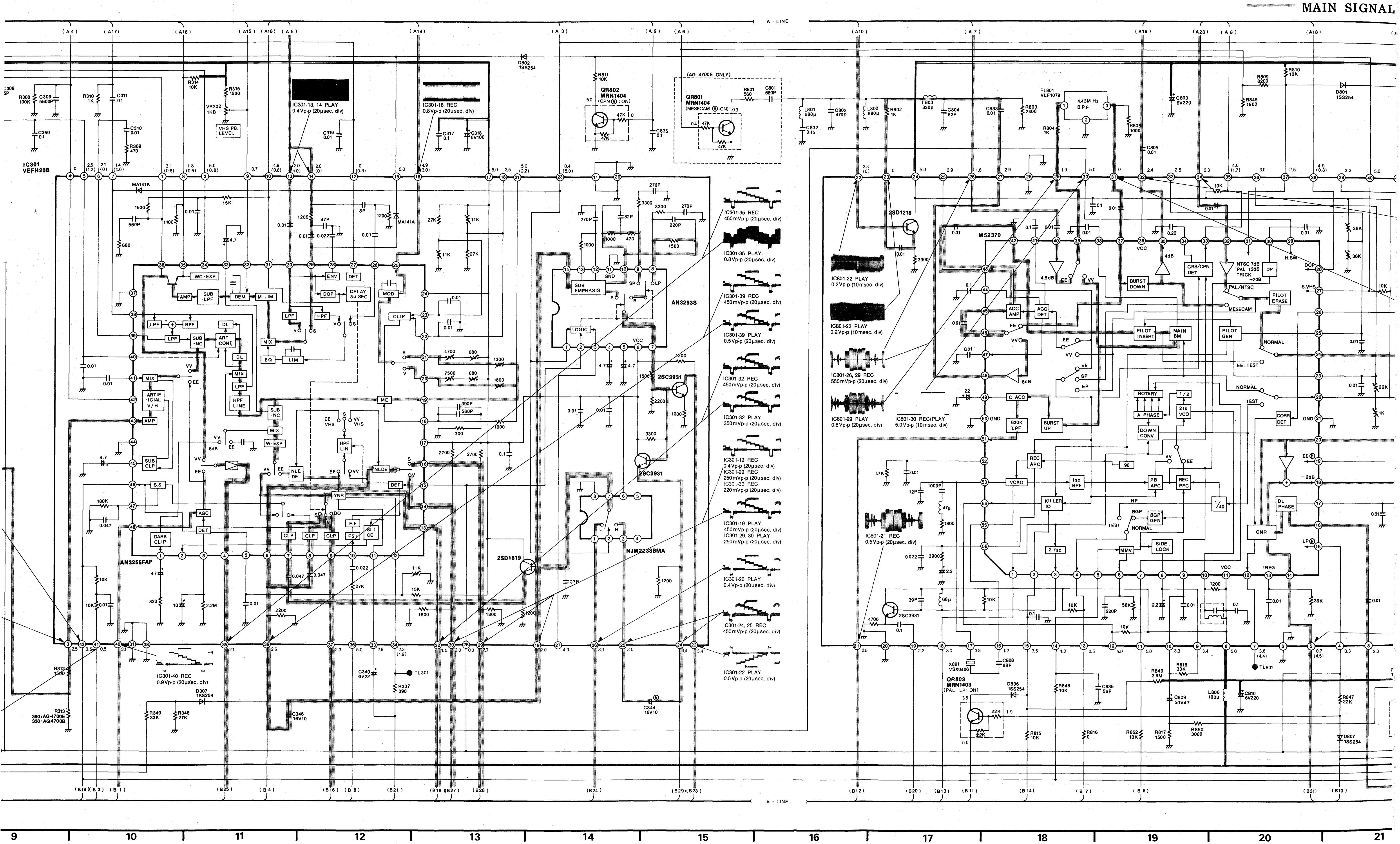

C
B
A
1
2
3
4
P2004
C2529
QR2501
W8
W2
W7
D2503
R2504
L2501
R2503
C2501
C2502
D2501
D2502
W13
TP2026
CAP R/S/F
C2503
W3
R2523
IC2501
C2504
R2502
C2509
C2510
R2522
R2514
R2525
R2520
L2502
R2521
C2508
R2517
IC2503
C2512
C2511
C2513
C2514
P2003
C2521
C2517
W5
R2511
W1
R2515
C2515
C2516
C2518
C2520
R2518
R2519
C2519
L2503
W4
K2502
R2516
W101
R2510
R2524
PS2002
CAP FG1
C2528
TP2015
IC2504
R2528
R2530
C2534
C2527
R2529
D2507
D2508
C2526
IC2502
D2505
D2506
R2526
C2522
R2532
C2524
C2506
C2535
R2531
C2523
C2525
R2527
W12
R2507
D2504
R2506
R2505
R2509
R2508
TL54
R2501
C2533
IC2505
C2507
W11
C2532
C2530
R2533
R2540
R2539
R2541
R2538
R2534
R2513
C2505
R2535
R2536
R2537
D2510
C2531
W6
W9
W10
PS2001

CAPSTAN DRIVE PACK C.B.A.	
Transistor & Resistor	
QR2501	C-2
Integrated Circuit	
IC2501 IC2502 IC2503 IC2504 IC2505	B-3 C-4 B-3 C-4 B-4
Test Point	
TP2015 TP2026	C-4 B-3
Connector	
P2003 P2004 PS2001 PS2202	B-1 C-1 A-4 A-2

ADDRESS INFORMATION

LUMINANCE & CHROMINANCE PACK LUMINANCE & CHROMINANCE PACK CAPSTAN DRIVE PACK

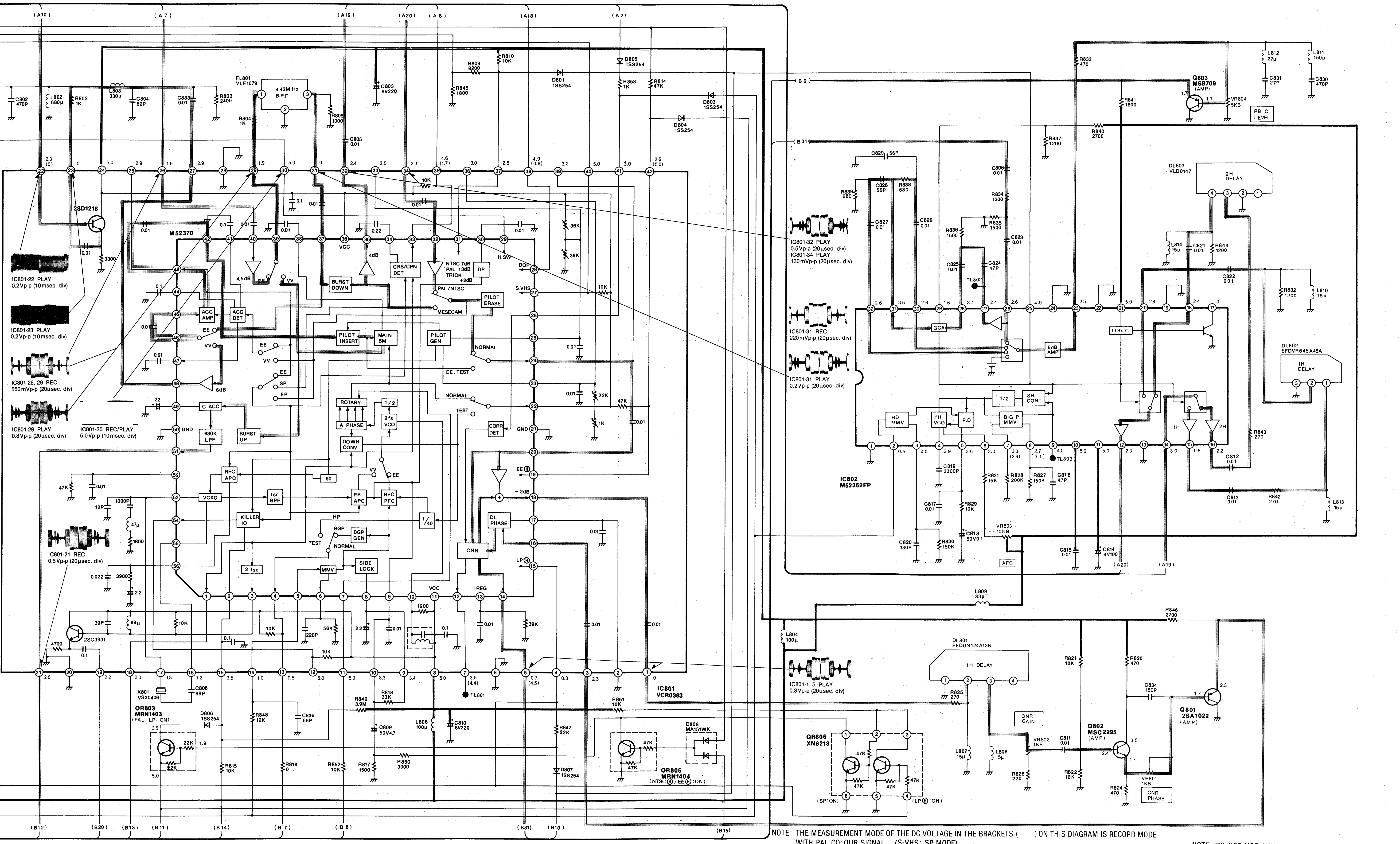
MAIN SIGNAL


A · LINE
B · LINE
IC301
VEFH20B
AN3255FAP
AN3293S
NJM2233BMA
M52370
QR802
MRN1404
QR801
MRN1404
(AG-4700E ONLY)
(MESECAM Ⓗ:ON)
QR803
MRN1403
(PAL LP: ON)
2SC3931
2SD1819
2SD1218
X801
VSX0406
FL801
VLF1079
4.43M Hz
B.P.F
VR302
1KB
VHS PB. LEVEL
D802
1SS254
D801
1SS254
D806
1SS254
D807
1SS254
D307
1SS254
MA141K
MA141A
TL301
TL801
WC·EXP
SUB·LPF
AMP
DEM
M·LIM
ENV
DET
DOP
DELAY 3μ SEC
MOD
CLIP
LPF
BPF
HPF
DL
SUB·NC
ART CONT
MIX
EQ
LIM
ARTIFICIAL V/H
SUB·CLP
S.S
AGC
DARK CLIP
HPF LINE
W·EXP
NLE DE
HPF LIN
YNR
NLDE
ME
F.F
FSI
SLICE
SUB EMPHASIS
LOGIC
ACC AMP
ACC DET
C ACC
630K LPF
BURST UP
BURST DOWN
CRS/CPN DET
NTSC 7dB PAL 13dB TRICK +2dB
PAL/NTSC
PILOT ERASE
MESECAM
PILOT INSERT
MAIN BM
PILOT GEN
NORMAL
EE·TEST
ROTARY
A PHASE
1/2
2fs VCO
DOWN CONV
CORR DET
REC APC
VCXO
fsc BPF
KILLER IO
PB APC
REC PFC
1/40
BGP GEN
2 fsc
MMV
SIDE LOCK
DL PHASE
CNR
H.SW
S.VHS
IC301-13, 14 PLAY 0.4Vp-p (20μsec. div)
IC301-16 REC 0.8Vp-p (20μsec. div)
IC301-35 REC 450mVp-p (20μsec. div)
IC301-35 PLAY 0.8Vp-p (20μsec. div)
IC301-39 REC 450mVp-p (20μsec. div)
IC301-39 PLAY 0.5Vp-p (20μsec. div)
IC301-32 REC 450mVp-p (20μsec. div)
IC301-32 PLAY 350mVp-p (20μsec. div)
IC301-19 REC 0.4Vp-p (20μsec. div) IC301-29 REC 250mVp-p (20μsec. div) IC301-30 REC 220mVp-p (20μsec. div)
IC301-19 PLAY 450mVp-p (20μsec. div) IC301-29, 30 PLAY 250mVp-p (20μsec. div)
IC301-26 PLAY 0.4Vp-p (20μsec. div)
IC301-24, 25 REC 450mVp-p (20μsec. div)
IC301-22 PLAY 0.5Vp-p (20μsec. div)
IC301-40 REC 0.9Vp-p (20μsec. div)
IC801-22 PLAY 0.2Vp-p (10msec. div)
IC801-23 PLAY 0.2Vp-p (10msec. div)
IC801-26, 29 REC 550mVp-p (20μsec. div)
IC801-29 PLAY 0.8Vp-p (20μsec. div)
IC801-30 REC/PLAY 5.0Vp-p (10msec. div)
IC801-21 REC 0.5Vp-p (20μsec. div)
R313 360: AG-4700E 330: AG-4700B
(A4) (A17) (A16) (A15) (A18) (A5) (A14) (A3) (A9) (A6) (A10) (A7) (A19) (A20) (A8) (A18)
(B19)(B3) (B1) (B25) (B4) (B16) (B8) (B21) (B18)(B27) (B28) (B24) (B29)(B23) (B12) (B20) (B13) (B11) (B14) (B7) (B6) (B31) (B10)

9 10 11 12 13 14 15 16 17 18 19 20 21

MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE

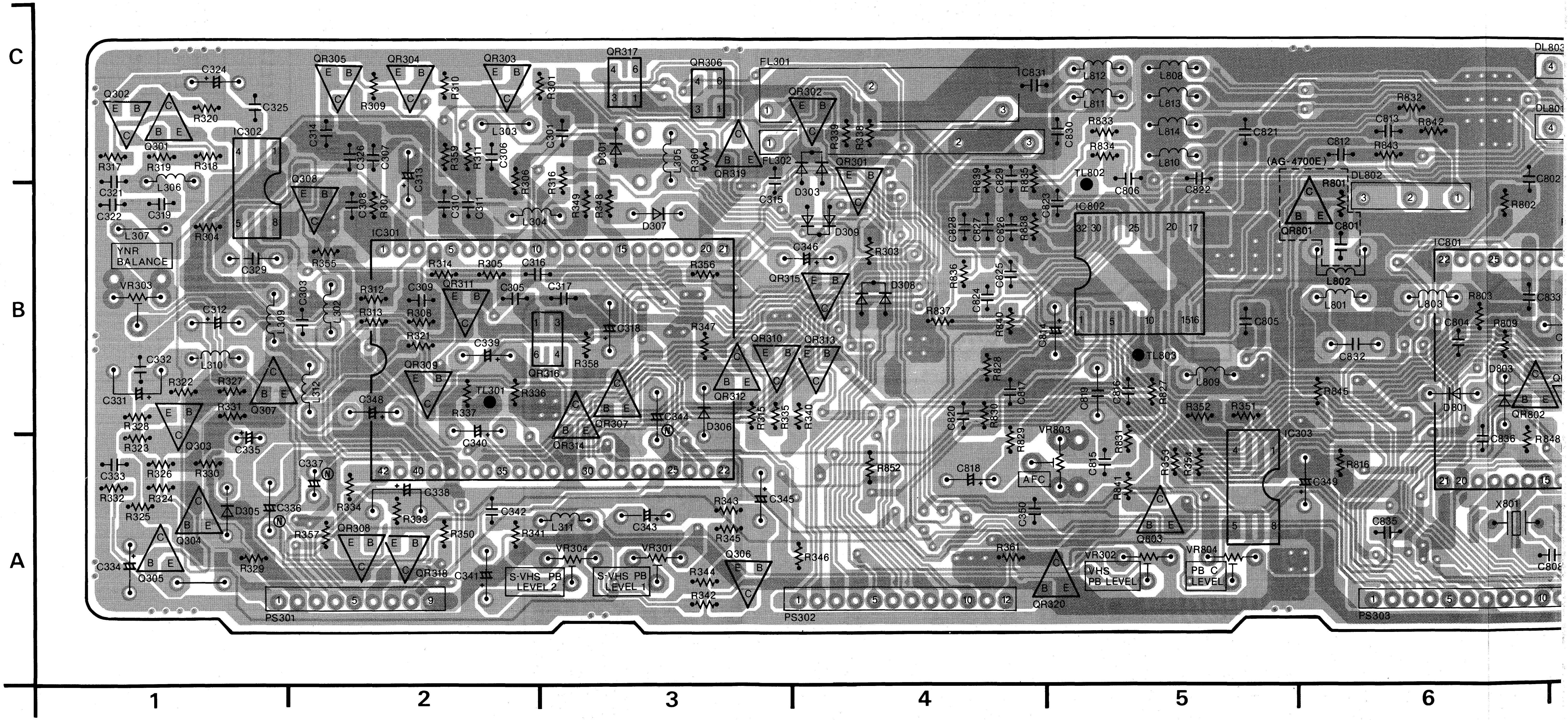

IC801-22 PLAY
0.2Vp-p (10msec. div)
IC801-23 PLAY
0.2Vp-p (10msec. div)
IC801-26, 29 REC
550mVp-p (20µsec. div)
IC801-29 PLAY
0.8Vp-p (20µsec. div)
IC801-30 REC/PLAY
5.0Vp-p (10msec. div)
IC801-21 REC
0.5Vp-p (20µsec. div)
IC801-32 PLAY
0.5Vp-p (20µsec. div)
IC801-34 PLAY
130mVp-p (20µsec. div)
IC801-31 REC
220mVp-p (20µsec. div)
IC801-31 PLAY
0.2Vp-p (20µsec. div)
IC801-1, 5 PLAY
0.8Vp-p (20µsec. div)
M52370
IC801
VCR0383
IC802
M52352FP
2SD1218
FL801
VLF1079
4.43M Hz
B.P.F
Q803
MSB709
(AMP)
Q802
MSC2295
(AMP)
Q801
2SA1022
(AMP)
QR803
MRN1403
(PAL LP: ON)
QR805
MRN1404
(NTSC(H)/EE(H):ON)
QR806
XN6213
(SP:ON)
(LP(H):ON)
2SC3931
X801
VSX0406
DL801
EFDUN124A13N
1H DELAY
DL802
EFDVR645A45A
1H
DELAY
DL803
VLD0147
2H
DELAY
PB C
LEVEL
CNR
GAIN
CNR
PHASE
AFC
ACC AMP
ACC DET
BURST DOWN
CRS/CPN DET
PILOT ERASE
PILOT INSERT
MAIN BM
PILOT GEN
ROTARY
A PHASE
DOWN CONV
2fs VCO
C ACC
630K LPF
BURST UP
REC APC
VCXO
fsc BPF
KILLER IO
PB APC
REC PFC
BGP GEN
SIDE LOCK
MMV
2 fsc
CNR
DL PHASE
CORR DET
HD MMV
fH VCO
P.D
B.G.P MMV
SH CONT
GCA
LOGIC
6dB AMP
TL801
TL802
TL803
(A10)
(A7)
(A19)
(A20)
(A8)
(A18)
(A2)
(B9)
(B31)
(B12)
(B20)
(B13)
(B11)
(B14)
(B7)
(B6)
(B31)
(B10)
(B15)

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

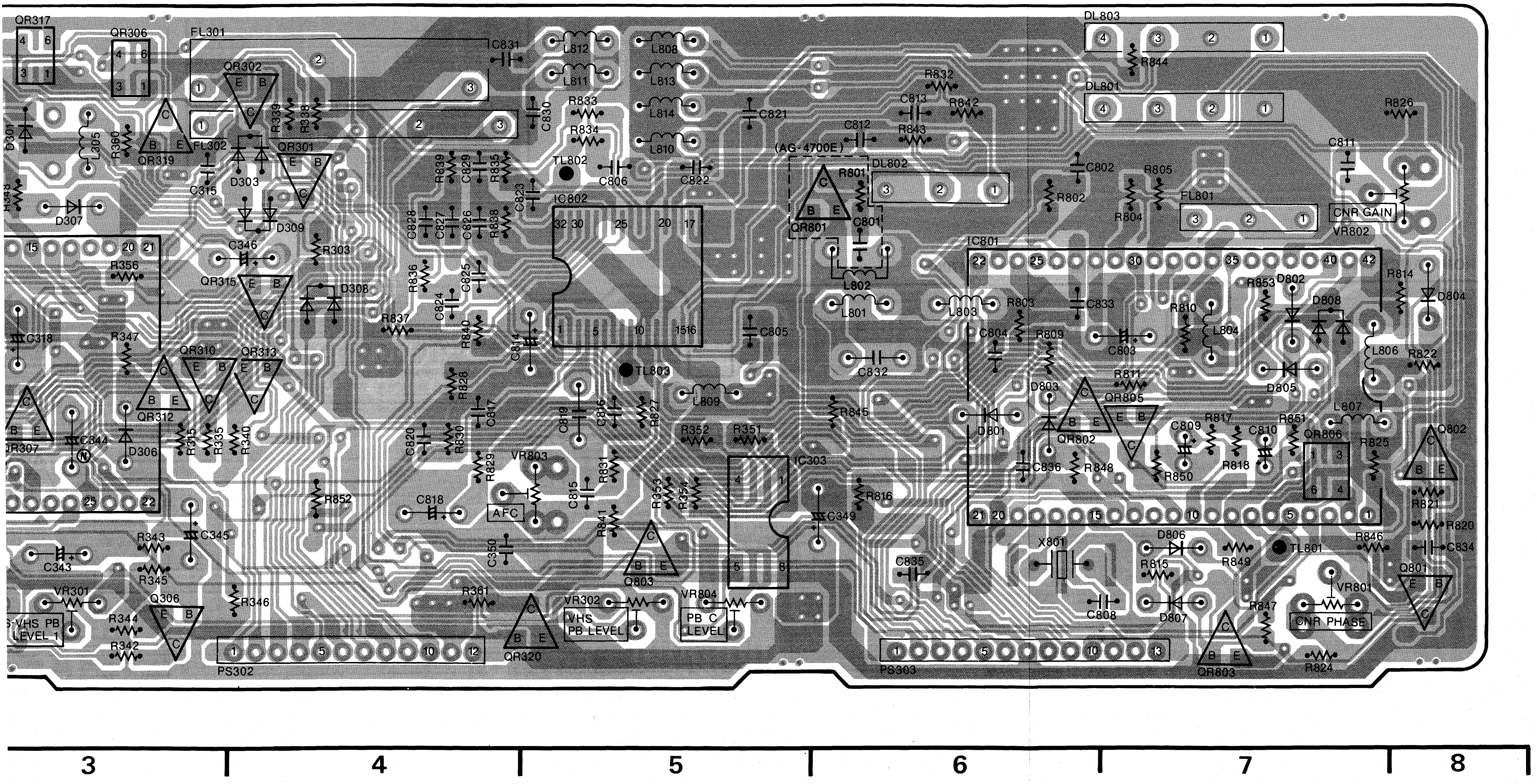
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

17 18 19 20 21 22 23 24 25 26 27

4-10. LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03A61A: AG-4700E) (VEP03A61E: AG-4700B)


C
B
A
1
2
3
4
5
6
Q302
Q301
C324
C325
R320
R317
R319
R318
C321
L306
C322
C319
L307
R304
IC302
Q308
YNR BALANCE
C329
R355
VR303
C312
L309
C303
L302
C332
L310
C331
R322
R327
R328
R331
Q307
L312
R323
Q303
C335
C333
R326
R330
R332
R324
R325
Q304
D305
C336
C334
Q305
R329
QR305
QR304
QR303
R309
R310
R301
C314
C326
C307
C313
R359
R311
C306
L303
C308
R307
C310
C311
R306
R316
L304
R349
R348
QR317
QR306
C301
D301
L305
R360
QR319
D307
IC301
R314
R305
C316
R356
R312
C309
QR311
C305
C317
R313
R308
R321
C339
C318
R347
QR309
R358
QR316
TL301
R336
R337
C340
QR314
QR307
C344
D306
QR312
C348
C337
C338
R334
R333
QR308
R357
R350
QR318
C341
C342
L311
C343
R341
VR304
VR301
S-VHS PB LEVEL 2
S-VHS PB LEVEL 1
PS301
FL301
QR302
R339
R338
FL302
QR301
C315
D303
D309
C346
R303
QR315
D308
QR310
QR313
R315
R335
R340
R343
C345
R345
R344
R342
Q306
R346
R852
PS302
C831
L812
L811
L808
L813
L814
L810
R833
R834
C830
TL802
C806
C822
C821
R839
C829
R835
C823
IC802
C828
C827
C826
R838
R836
C825
C824
R837
R840
C814
R826
C817
TL803
C819
C816
R827
L809
R852
R351
C820
R830
R829
VR803
AFC
C815
R831
C818
R841
R353
R354
C830
Q803
R361
QR320
VR302
VHS PB LEVEL
VR804
PB C LEVEL
IC303
C349
R816
R845
R832
C813
R842
C812
R843
(AG-4700E)
QR801
R801
C801
DL802
L802
L801
IC801
L803
R803
C804
R809
C805
C832
C833
D803
D801
QR802
C836
R848
C835
X801
C802
R802
DL803
DL801
PS303

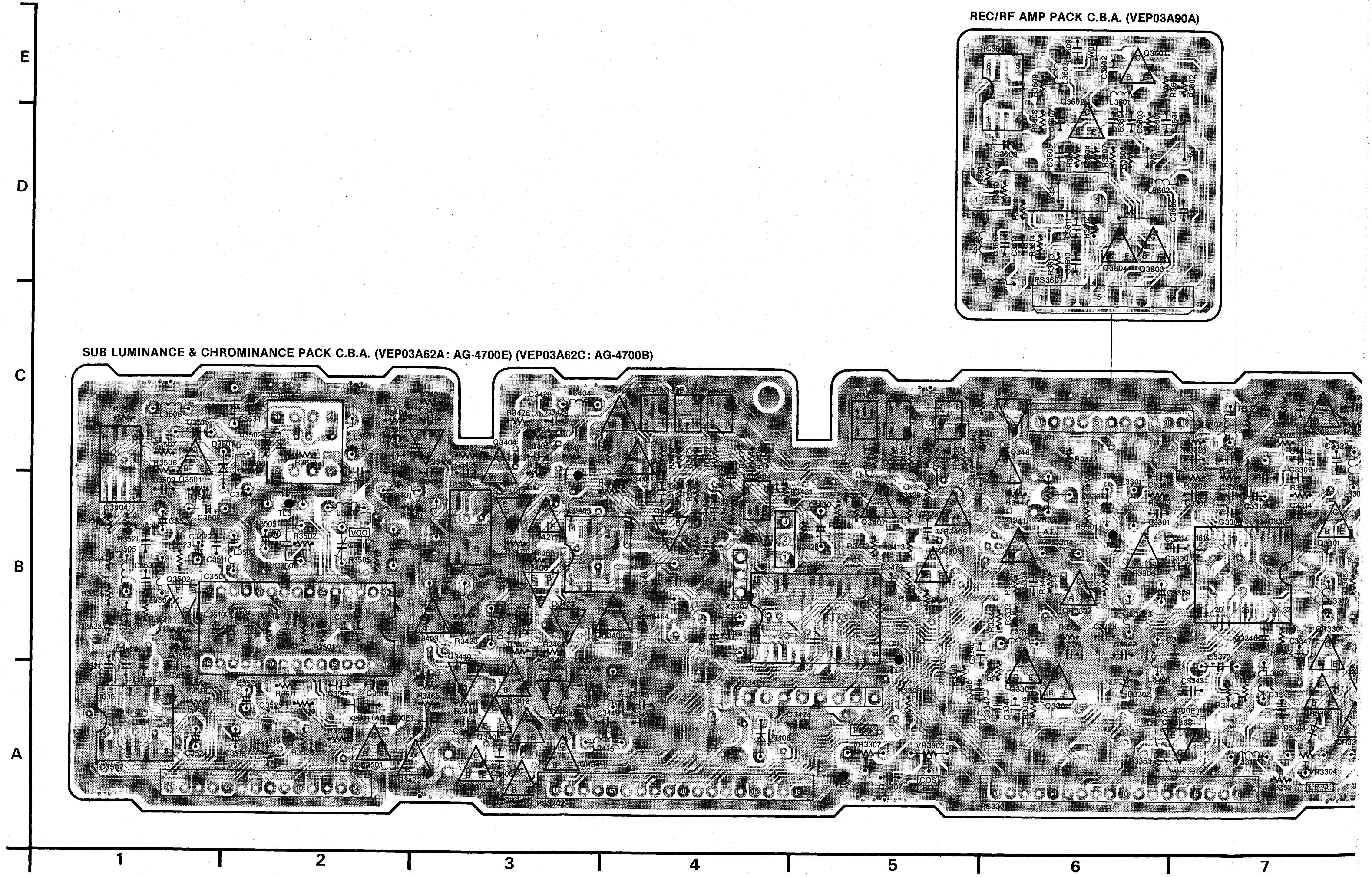
A: AG-4700E) (VEP03A61E: AG-4700B)


QR317
QR306
FL301
QR302
FL302
QR319
QR301
D303
D301
L305
R360
C315
D307
D309
C346
R303
QR315
D308
R356
R347
C318
QR310
QR313
QR312
QR307
C344
D306
R315
R335
R340
R852
C345
R343
R345
C343
VR301
Q306
R346
R344
R342
S-VHS PB LEVEL 1
PS302
QR320
R361
VR302
VHS PB LEVEL
VR804
PB C LEVEL
Q803
C831
L812
L811
L808
L813
L814
L810
C830
R833
R834
TL802
C806
C822
C821
IC802
R839
C829
R835
C823
C828
C827
C826
R838
R836
C825
C824
R837
R840
C814
TL803
L809
R828
C817
C819
C816
R827
C820
R830
R829
VR803
AFC
C815
R831
C818
C350
R841
R352
R351
R353
R354
IC303
C349
R816
C835
(AG-4700E)
QR801
R801
C801
DL802
C812
R843
C813
R832
R842
L802
L801
C805
C832
R845
DL803
R844
DL801
R826
C811
C802
R805
R802
R804
FL801
CNR GAIN
VR802
IC801
L803
R803
C833
C804
R809
C803
R810
L804
R853
D802
D808
R814
D804
L806
R822
D805
R811
QR805
D803
D801
QR802
C809
R817
C810
R851
QR806
L807
R825
C836
R848
R850
R818
Q802
R821
R820
C834
R846
X801
D806
R849
TL801
R815
C808
D807
R847
VR801
CNR PHASE
Q801
QR803
R824
PS303
3
4
5
6
7
8

LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor	
Q301	C-1
Q302	C-1
Q303	A-1
Q304	A-1
Q305	A-1
Q306	A-3
Q307	B-1
Q308	B-2
Q801	A-8
Q802	B-8
Q803	A-5
Transistor & Resistor	
QR301	C-4
QR302	C-4
QR303	C-2
QR304	C-2
QR305	C-2
QR306	C-3
QR307	B-3
QR308	A-2
QR309	B-2
QR310	B-3
QR311	B-2
QR312	B-3
QR313	B-4
QR314	B-3
QR315	B-4
QR316	B-3
QR317	C-3
QR318	A-2
QR319	C-3
QR320	A-5
QR801	B-6
QR802	B-6
QR803	A-7
QR805	B-7
QR806	B-7
Integrated Circuit	
IC301	B-2
IC302	C-1
IC303	A-5
IC801	B-6
IC802	B-5
Adjustment	
VR301	A-3
VR302	A-5
VR303	B-1
VR304	A-3
VR801	A-7
VR802	B-7
VR803	A-5
VR804	A-5
Connector	
PS301	A-2
PS302	A-4
PS303	A-6

ADDRESS INFORMATION

4-11. SUB LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03A62A: AG-4700E) (VEP03A62C: AG-4700B)



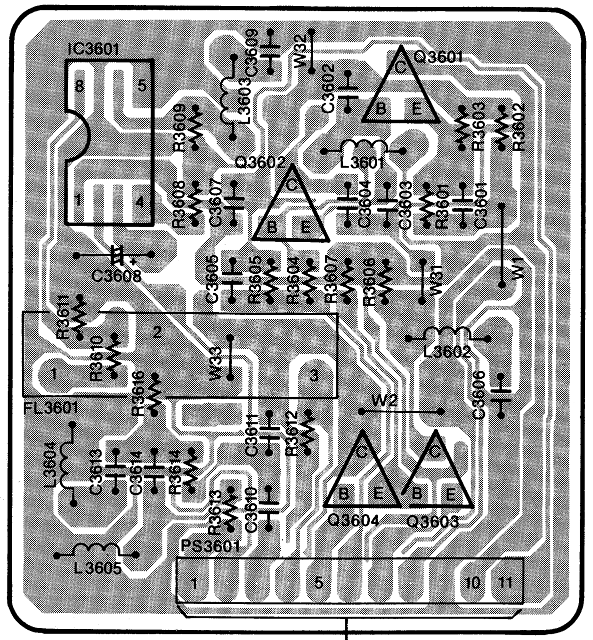
REC/RF AMP PACK C.B.A. (VEP03A90A)

SUB LUMINANCE & CHROMINANCE PACK C.B.A. (VEP03A62A: AG-4700E) (VEP03A62C: AG-4700B)

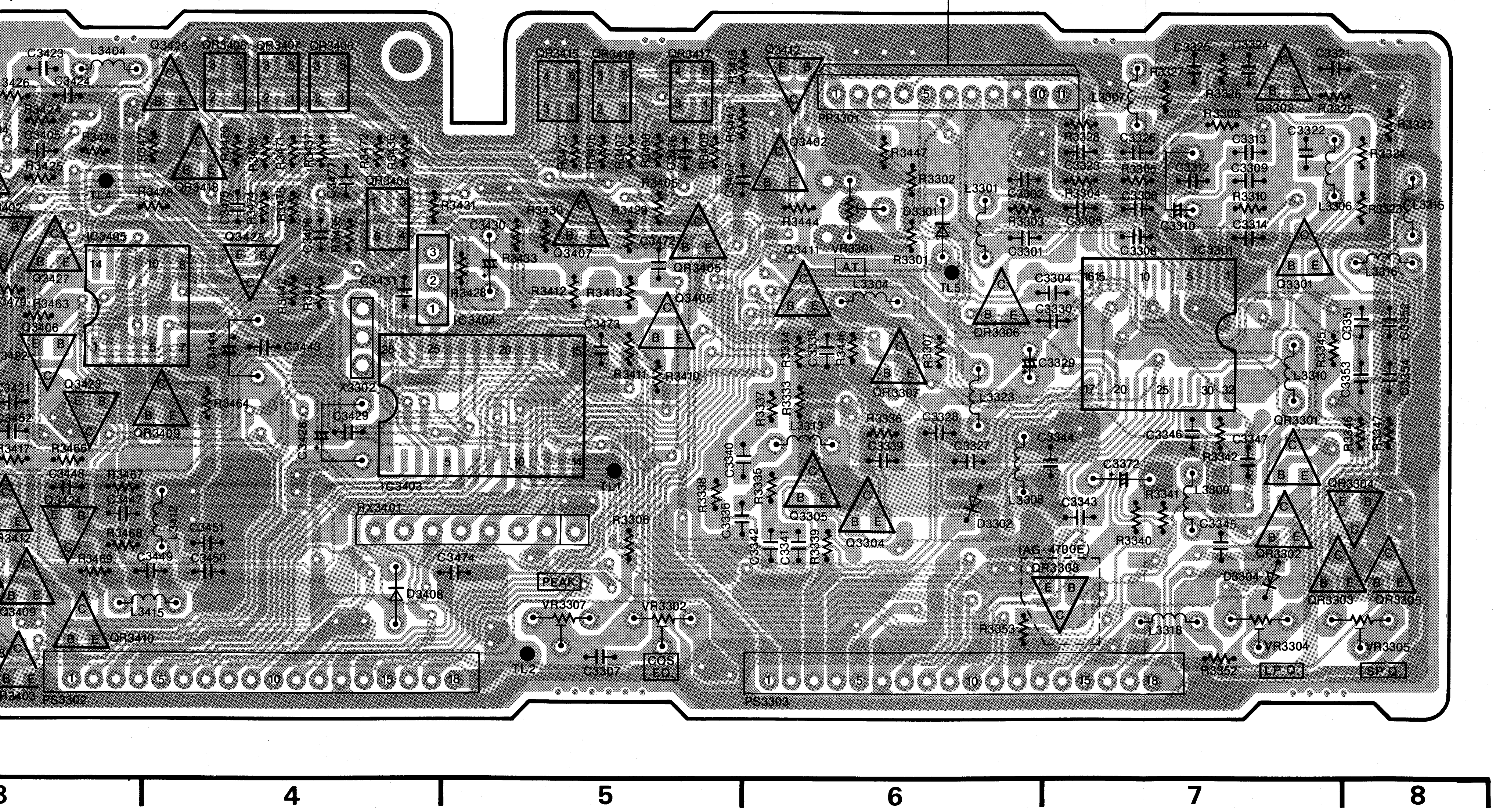
E
D
C
B
A
1
2
3
4
5
6
7
IC3601
FL3601
PS3601
Q3601
Q3602
Q3603
Q3604
IC3501
IC3502
IC3503
IC3504
PS3501
IC3401
IC3403
IC3404
IC3405
PS3302
RX3401
IC3301
PP3301
PS3303
TL1
TL2
TL3
TL4
TL5
VCO
PEAK
COS EQ.
LP Q.
AT
X3501 (AG-4700E)
(AG-4700E) QR3308
VR3301
VR3302
VR3304
VR3307
X3302

/EP03A62A: AG-4700E) (VEP03A62C: AG-4700B)

REC/RF AMP PACK C.B.A. (VEP03A90A)


IC3601
Q3601
Q3602
Q3603
Q3604
L3601
L3602
L3603
L3604
L3605
FL3601
W1
W2
W31
W32
W33
C3601
C3602
C3603
C3604
C3605
C3606
C3607
C3608
C3609
C3610
C3611
C3613
C3614
R3601
R3602
R3603
R3604
R3605
R3606
R3607
R3608
R3609
R3610
R3611
R3612
R3613
R3614
R3616
PS3601
1
5
10
11

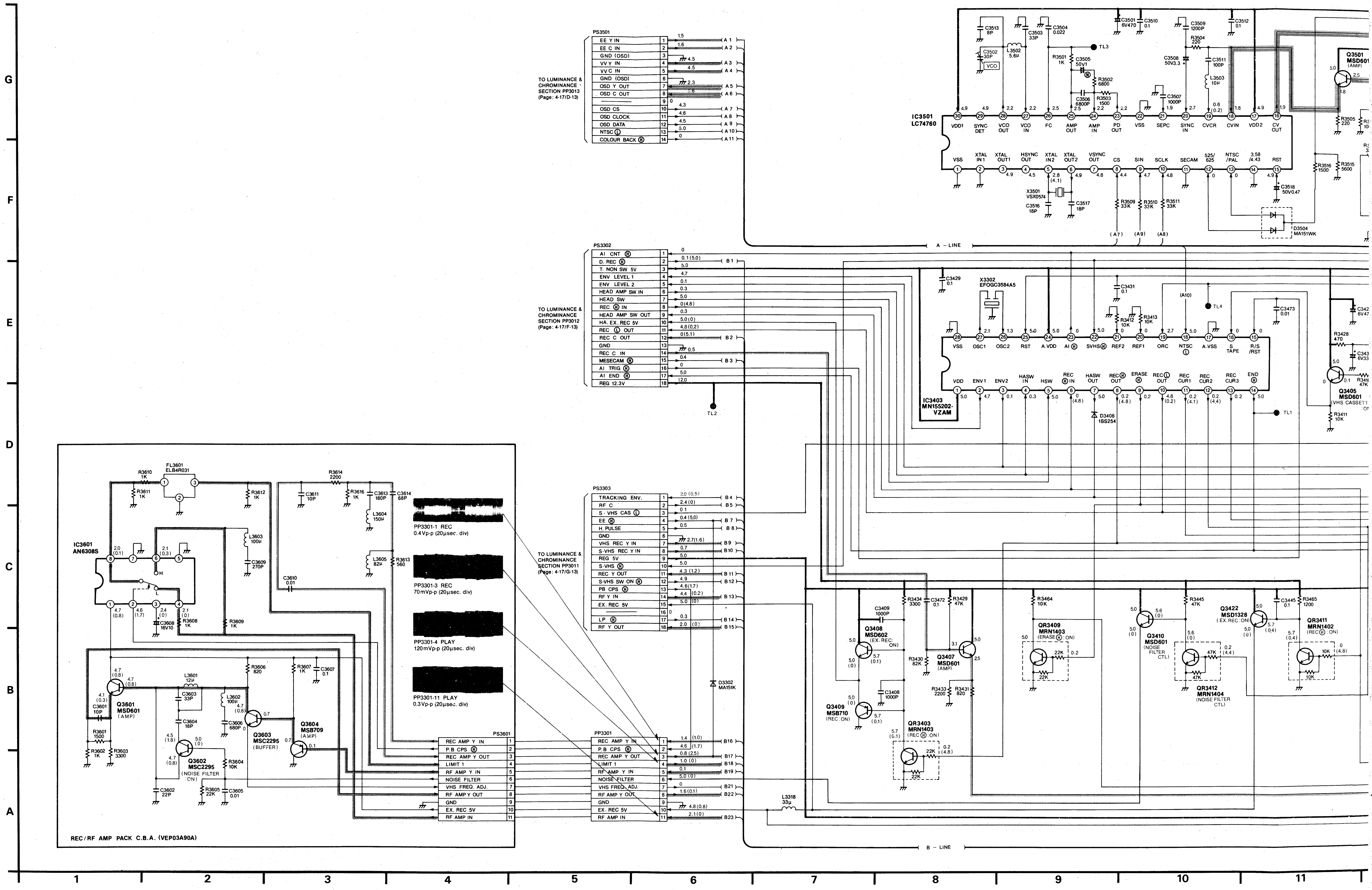
) (VEP03A62C: AG-4700B)


PP3301
PS3302
PS3303
IC3301
IC3403
IC3405
Q3301
Q3302
Q3304
Q3305
Q3402
Q3406
Q3407
Q3409
Q3411
Q3423
Q3424
Q3425
Q3426
Q3427
QR3301
QR3302
QR3303
QR3304
QR3305
QR3306
QR3307
(AG-4700E)
QR3308
QR3404
QR3405
QR3406
QR3407
QR3408
QR3409
QR3410
QR3415
QR3416
QR3417
QR3418
VR3301
VR3302
VR3304
VR3305
VR3307
X3302
RX3401
D3301
D3302
D3304
D3408
TL1
TL2
TL4
TL5
AT
PEAK
COS EQ
LP Q
SP Q
3
4
5
6
7
8

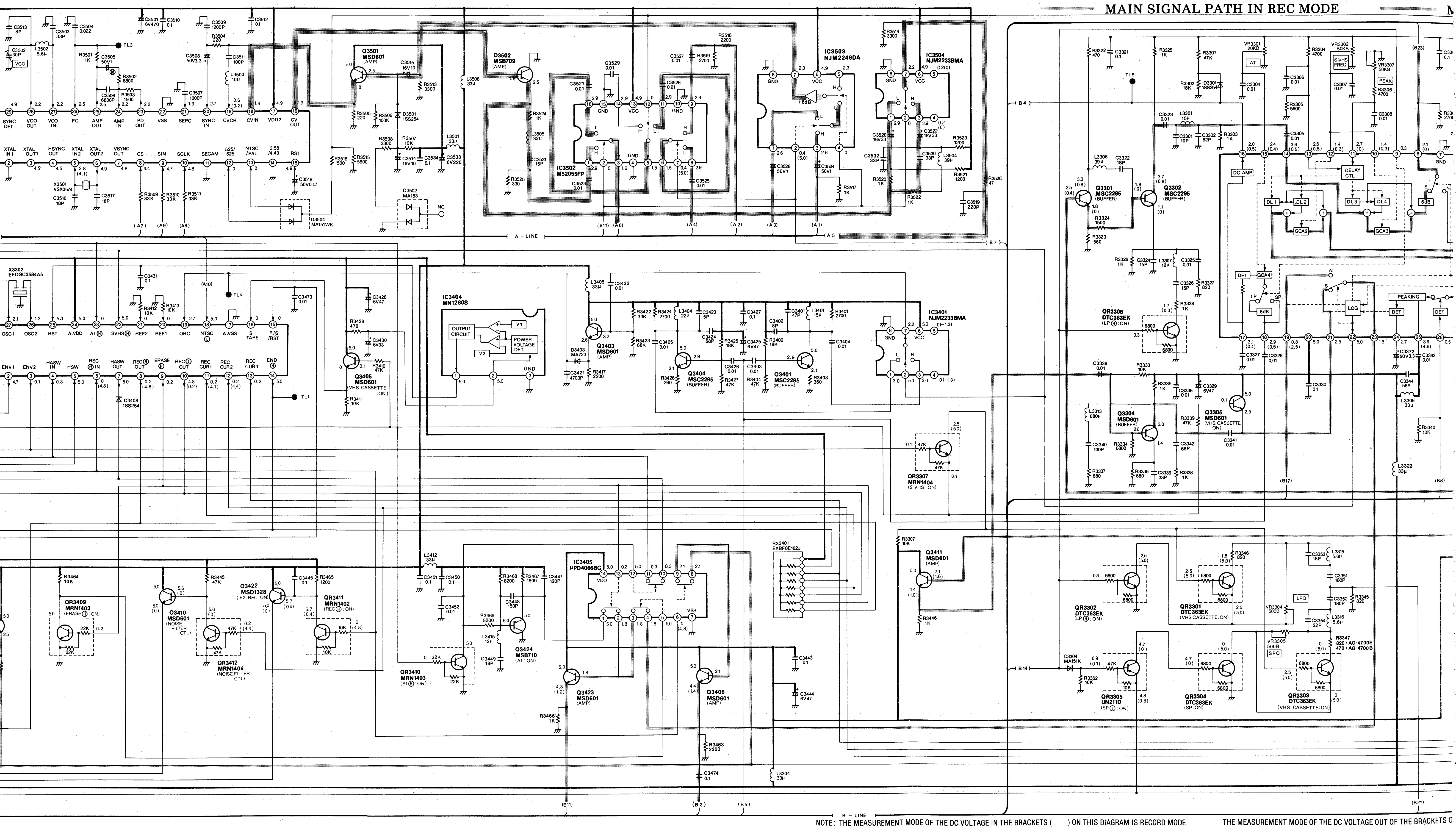
SUB LUMINANCE & CHROMINANCE PACK C.B.A.	
Transistor	
Q3301	B-7
Q3302	C-7
Q3304	A-6
Q3305	A-6
Q3401	C-3
Q3402	C-6
Q3403	B-3
Q3404	C-3
Q3405	B-5
Q3406	B-3
Q3407	B-5
Q3408	A-3
Q3409	A-3
Q3410	A-3
Q3411	B-6
Q3412	C-6
Q3422	A-3
Q3423	B-3
Q3424	A-3
Q3425	B-4
Q3426	C-4
Q3427	B-3
Q3501	C-1
Q3502	B-1
Q3601	E-6
Q3602	D-6
Q3603	D-6
Q3604	D-6
Transistor & Resistor	
QR3301	B-7
QR3302	A-7
QR3303	A-7
QR3304	A-8
QR3305	A-8
QR3306	B-6
QR3307	B-6
QR3308	A-7
QR3402	B-3
QR3403	A-3
QR3404	B-4
QR3405	B-5
QR3406	C-4
QR3407	C-4
QR3408	C-4
QR3409	B-4
QR3410	A-3
QR3411	A-3
QR3412	A-3
QR3415	C-5
QR3416	C-5
QR3417	C-5
QR3418	B-4
QR3501	A-2
Integrated Circuit	
IC3301	B-7
IC3401	B-3
IC3403	B-4
IC3404	B-4
IC3405	B-3
IC3501	B-2
IC3502	A-1
IC3503	C-2
IC3504	B-1
IC3601	E-6
Adjustment	
C3502	B-2
VR3301	B-6
VR3302	A-5
VR3304	A-7
VR3305	A-8
VR3307	A-5
Connector	
PP3301	C-6
PS3302	A-3
PS3303	A-6
PS3501	A-1
PS3601	C-6

ADDRESS INFORMATION

4-12. SUB LUMINANCE & CHROMINANCE PACK SCHEMATIC DIAGRAM


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
PS3501
EE Y IN
EE C IN
GND (OSD)
VV Y IN
VV C IN
GND (OSD)
OSD Y OUT
OSD C OUT
OSD CS
OSD CLOCK
OSD DATA
NTSC Ⓛ
COLOUR BACK Ⓗ
TO LUMINANCE & CHROMINANCE SECTION PP3013 (Page: 4-17/D-13)
IC3501 LC74760
VDD1
SYNC DET
VCO OUT
VCO IN
FC
AMP OUT
AMP IN
PD OUT
VSS
SEPC
SYNC IN
CVCR
CVIN
VDD2
CV OUT
XTAL IN1
XTAL OUT1
HSYNC OUT
XTAL IN2
XTAL OUT2
VSYNC OUT
CS
SIN
SCLK
SECAM
525/625
NTSC /PAL
3.58 /4.43
RST
X3501 VSX0574
D3504 MA151WK
TL3
Q3501 MSD601 (AMP)
A - LINE
PS3302
AI CNT Ⓗ
D. REC Ⓗ
T. NON SW 5V
ENV LEVEL 1
ENV LEVEL 2
HEAD AMP SW IN
HEAD SW
REC Ⓗ IN
HEAD AMP SW OUT
HA. EX. REC 5V
REC Ⓛ OUT
REC C OUT
GND
REC C IN
MESECAM Ⓗ
AI TRIG Ⓗ
AI END Ⓗ
REG 12.3V
TO LUMINANCE & CHROMINANCE SECTION PP3012 (Page: 4-17/F-13)
TL2
IC3403 MN155202-VZAM
X3302 EFOGC3584A5
VSS
OSC1
OSC2
RST
A.VDD
AI Ⓗ
SVHS Ⓗ
REF2
REF1
ORC
NTSC Ⓛ
A.VSS
S TAPE
R/S /RST
VDD
ENV1
ENV2
HASW IN
HSW
REC Ⓗ IN
HASW OUT
REC Ⓗ OUT
ERASE Ⓗ
REC Ⓛ OUT
REC CUR1
REC CUR2
REC CUR3
END Ⓗ
D3408 1SS254
TL4
TL1
Q3405 MSD601 (VHS CASSETTE)
PS3303
TRACKING ENV.
RF C
S - VHS CAS Ⓛ
EE Ⓗ
H. PULSE
GND
VHS REC Y IN
S-VHS REC Y IN
REG 5V
S-VHS
REC Y OUT
S-VHS SW ON Ⓗ
PB CPS Ⓗ
RF Y IN
EX. REC 5V
LP Ⓗ
RF Y OUT
TO LUMINANCE & CHROMINANCE SECTION PP3011 (Page: 4-17/G-13)
D3302 MA151K
PP3301
REC AMP Y IN
P.B CPS Ⓗ
REC AMP Y OUT
LIMIT 1
RF AMP Y IN
NOISE FILTER
VHS FREQ. ADJ.
RF AMP Y OUT
GND
EX. REC 5V
RF AMP IN
L3318 33μ
B - LINE
Q3408 MSD602 (EX. REC ON)
Q3409 MSB710 (REC ON)
Q3407 MSD601 (AMP)
QR3403 MRN1403 (REC Ⓗ ON)
QR3409 MRN1403 (ERASE Ⓗ ON)
Q3410 MSD601 (NOISE FILTER CTL)
QR3412 MRN1404 (NOISE FILTER CTL)
Q3422 MSD1328 (EX. REC ON)
QR3411 MRN1402 (REC Ⓗ ON)
IC3601 AN6308S
FL3601 ELB4R031
Q3601 MSD601 (AMP)
Q3602 MSC2295 (NOISE FILTER ON)
Q3603 MSC2295 (BUFFER)
Q3604 MSB709 (AMP)
PP3301-1 REC 0.4Vp-p (20μsec. div)
PP3301-3 REC 70mVp-p (20μsec. div)
PP3301-4 PLAY 120mVp-p (20μsec. div)
PP3301-11 PLAY 0.3Vp-p (20μsec. div)
PS3601
REC/RF AMP PACK C.B.A. (VEP03A90A)

MAIN SIGNAL PATH IN REC MODE

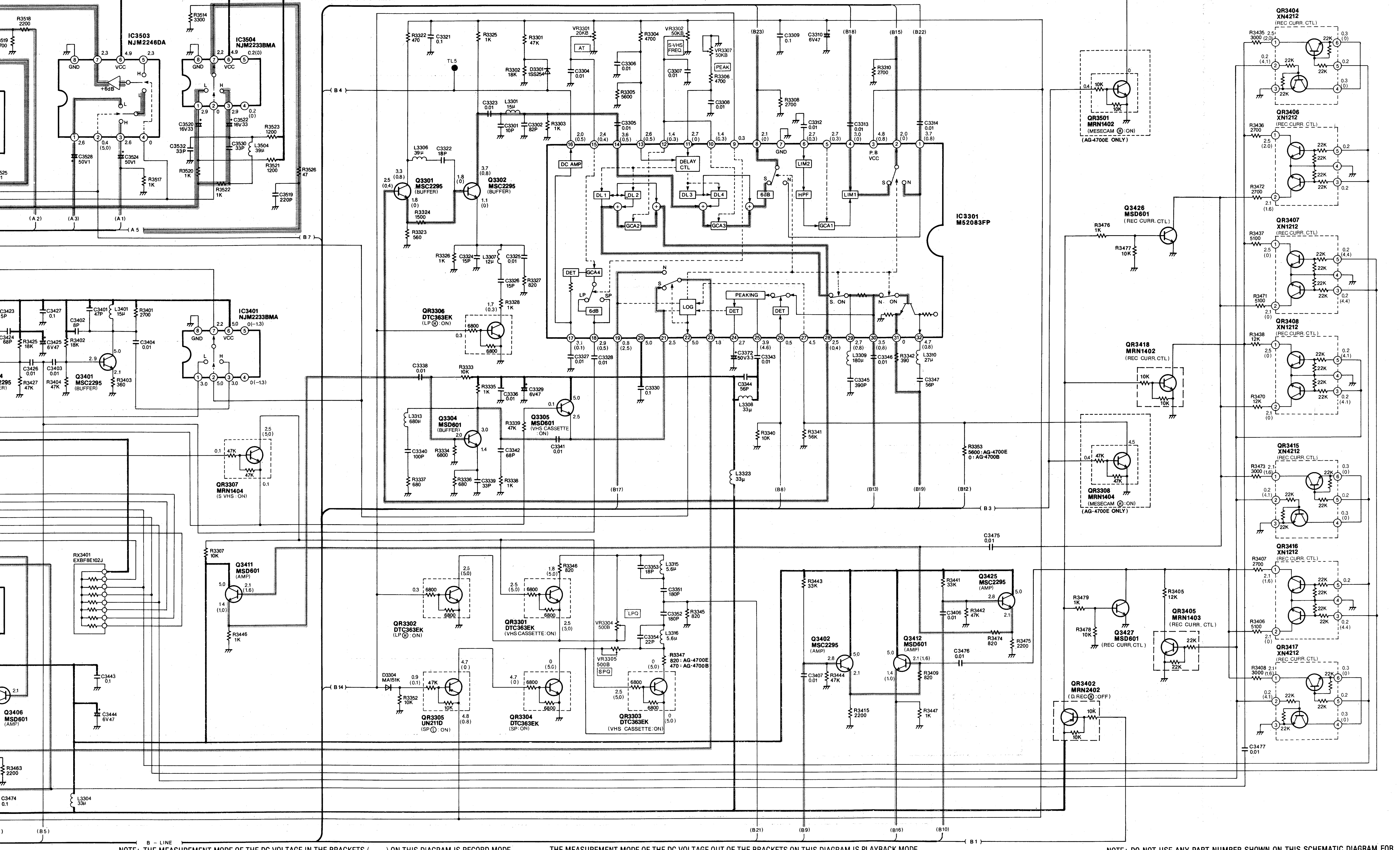

IC3502 M52055FP
IC3503 NJM2246DA
IC3504 NJM2233BMA
IC3401 NJM2233BMA
IC3404 MN1280S
IC3405 μPD4066BG
Q3501 MSD601 (AMP)
Q3502 MSB709 (AMP)
Q3403 MSD601 (AMP)
Q3404 MSC2295 (BUFFER)
Q3401 MSC2295 (BUFFER)
Q3405 MSD601 (VHS CASSETTE : ON)
Q3301 MSC2295 (BUFFER)
Q3302 MSC2295 (BUFFER)
QR3306 DTC363EK (LP Ⓗ : ON)
Q3304 MSD601 (BUFFER)
Q3305 MSD601 (VHS CASSETTE : ON)
QR3307 MRN1404 (S VHS : ON)
Q3411 MSD601 (AMP)
QR3302 DTC363EK (LP Ⓗ : ON)
QR3301 DTC363EK (VHS CASSETTE : ON)
QR3305 UN211D (SP Ⓛ : ON)
QR3304 DTC363EK (SP : ON)
QR3303 DTC363EK (VHS CASSETTE : ON)
QR3409 MRN1403 (ERASE Ⓗ : ON)
Q3410 MSD601 (NOISE FILTER CTL)
QR3412 MRN1404 (NOISE FILTER CTL)
Q3422 MSD1328 (EX.REC : ON)
QR3411 MRN1402 (REC Ⓗ : ON)
QR3410 MRN1403 (AI Ⓗ : ON)
Q3424 MSB710 (AI : ON)
Q3423 MSD601 (AMP)
Q3406 MSD601 (AMP)
RX3401 EXBF8E102J
X3501 VSX0574
X3302 EFOGC3584A5
D3504 MA151WK
D3502 MA153
D3403 MA723
D3408 1SS254
D3304 MA151K
TL1
TL3
TL4
TL5
A – LINE
B – LINE
OUTPUT CIRCUIT
POWER VOLTAGE DET.
V1
V2
DC AMP
DELAY CTL
DL1
DL2
DL3
DL4
GCA2
GCA3
GCA4
DET
6dB
LOG
PEAKING
AT
S-VHS FREQ
PEAK
LPQ
SPQ
VR3301 20KB
VR3302 50KB
VR3307 50KB
VR3304 500B
VR3305 500B
R3347 820 : AG-4700E 470 : AG-4700B
SYNC DET
VCO OUT
VCO IN
FC
AMP OUT
AMP IN
PD OUT
VSS
SEPC
SYNC IN
CVCR
CVIN
VDD2
CV OUT
XTAL IN1
XTAL OUT1
HSYNC OUT
XTAL IN2
XTAL OUT2
VSYNC OUT
CS
SIN
SCLK
SECAM
525/625
NTSC /PAL
3.58 /4.43
RST
OSC1
OSC2
A.VDD
AI Ⓗ
SVHS Ⓗ
REF2
REF1
ORC
NTSC Ⓛ
A.VSS
S TAPE
R/S /RST
ENV1
ENV2
HASW IN
HSW
REC Ⓗ IN
HASW OUT
REC Ⓗ OUT
ERASE Ⓗ
REC Ⓛ OUT
REC CUR1
REC CUR2
REC CUR3
END Ⓗ
9
10
11
12
13
14
15
16
17
18
19
20

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS (   ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS O WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE


IC3503
NJM2246DA
IC3504
NJM2233BMA
IC3401
NJM2233BMA
IC3301
M52083FP
Q3301
MSC2295
(BUFFER)
Q3302
MSC2295
(BUFFER)
Q3304
MSD601
(BUFFER)
Q3305
MSD601
(VHS CASSETTE : ON)
Q3401
MSC2295
(BUFFER)
Q3406
MSD601
(AMP)
Q3411
MSD601
(AMP)
Q3402
MSC2295
(AMP)
Q3412
MSD601
(AMP)
Q3425
MSC2295
(AMP)
Q3426
MSD601
(REC CURR. CTL)
Q3427
MSD601
(REC CURR. CTL)
QR3306
DTC363EK
(LP Ⓗ : ON)
QR3307
MRN1404
(S-VHS : ON)
QR3302
DTC363EK
(LP Ⓗ : ON)
QR3301
DTC363EK
(VHS CASSETTE : ON)
QR3305
UN211D
(SP Ⓛ : ON)
QR3304
DTC363EK
(SP : ON)
QR3303
DTC363EK
(VHS CASSETTE : ON)
QR3501
MRN1402
(MESECAM Ⓡ : ON)
(AG-4700E ONLY)
QR3308
MRN1404
(MESECAM Ⓡ : ON)
(AG-4700E ONLY)
QR3418
MRN1402
(REC CURR. CTL)
QR3402
MRN2402
(D.REC Ⓡ : OFF)
QR3405
MRN1403
(REC CURR. CTL)
QR3404
XN4212
(REC CURR. CTL)
QR3406
XN1212
(REC CURR. CTL)
QR3407
XN1212
(REC CURR. CTL)
QR3408
XN1212
(REC CURR. CTL)
QR3415
XN4212
(REC CURR. CTL)
QR3416
XN1212
(REC CURR. CTL)
QR3417
XN4212
(REC CURR. CTL)
RX3401
EXBF8E102J
DC AMP
DELAY CTL
DL1
DL2
DL3
DL4
GCA1
GCA2
GCA3
GCA4
LIM1
LIM2
HPF
6dB
DET
LOG
PEAKING
S. ON
N. ON
AT
S-VHS FREQ.
PEAK
LPQ
SPQ
P.B VCC
GND
VCC
TL5
R3353
5600 : AG-4700E
0 : AG-4700B
R3347
820 : AG-4700E
470 : AG-4700B
(A1)
(A2)
(A3)
(A5)
(B1)
(B3)
(B4)
(B5)
(B7)
(B8)
(B9)
(B10)
(B12)
(B13)
(B14)
(B15)
(B16)
(B17)
(B18)
(B19)
(B21)
(B22)
(B23)
B - LINE

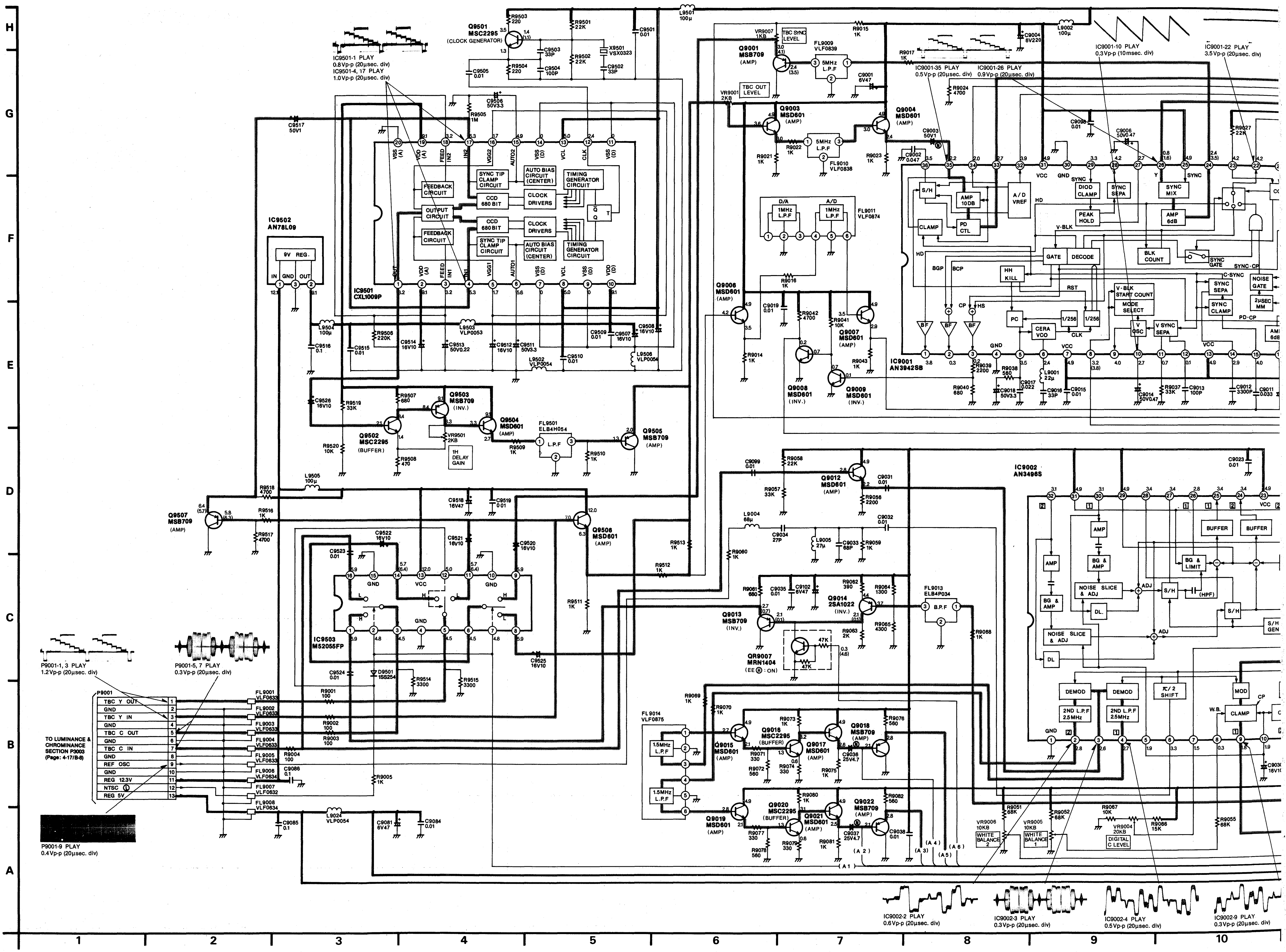
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

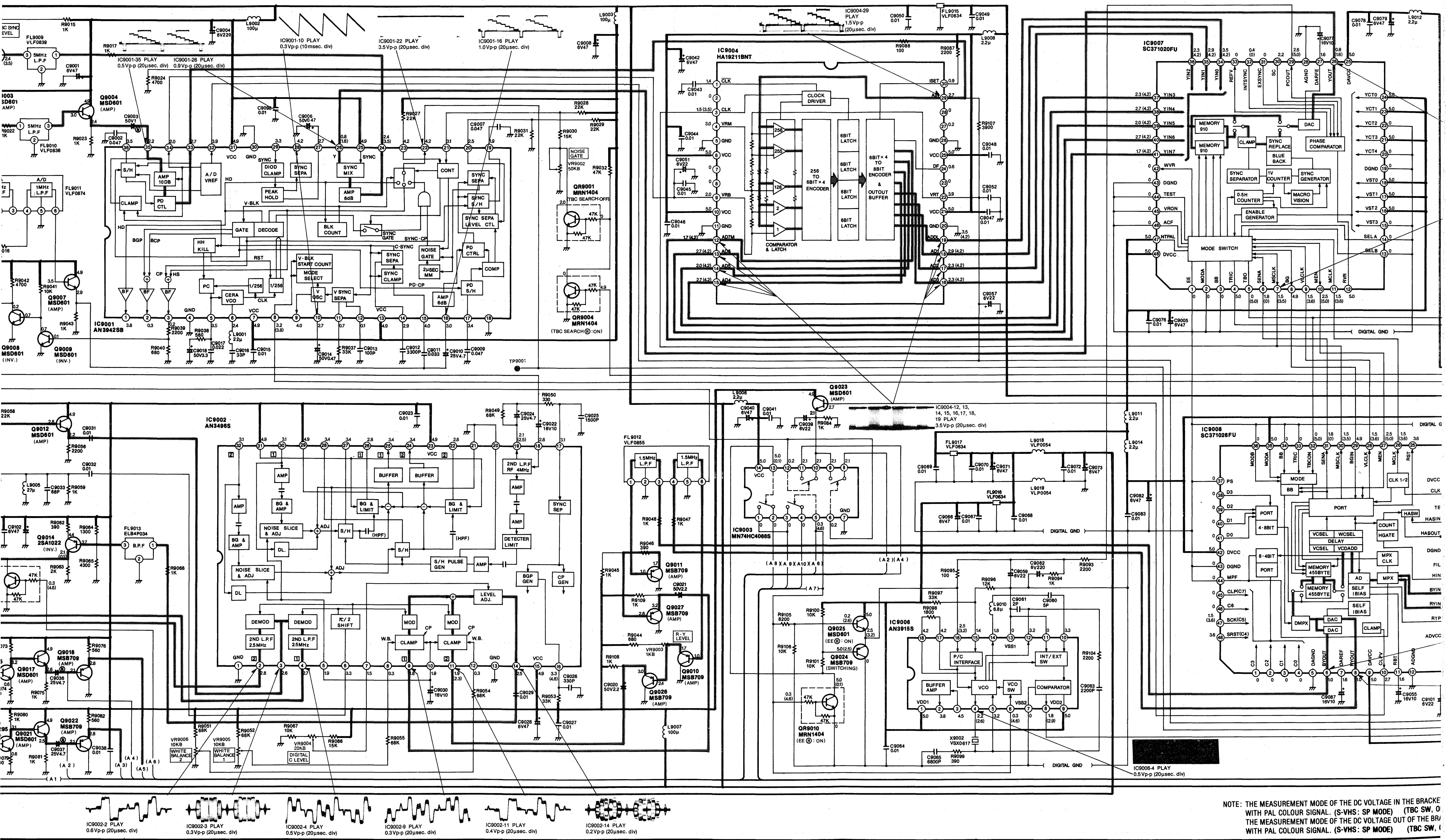
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

15 16 17 18 19 20 21 22 23 24 25

4-13. TBC SCHEMATIC DIAGRAM


H
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
IC9501-1 PLAY 0.8Vp-p (20μsec. div) IC9501-4, 17 PLAY 1.0Vp-p (20μsec. div)
Q9501 MSC2295 (CLOCK GENERATOR)
X9501 VSX0323
IC9502 AN78L09
9V REG.
IN GND OUT
IC9501 CXL1009P
FEEDBACK CIRCUIT
OUTPUT CIRCUIT
SYNC TIP CLAMP CIRCUIT
CCD 680 BIT
AUTO BIAS CIRCUIT (CENTER)
CLOCK DRIVERS
TIMING GENERATOR CIRCUIT
Q9502 MSC2295 (BUFFER)
Q9503 MSB709 (INV.)
Q9504 MSD601 (AMP)
Q9505 MSB709 (AMP)
FL9501 ELB4H054
L.P.F
1H DELAY GAIN
VR9501 2KB
Q9507 MSB709 (AMP)
Q9506 MSD601 (AMP)
IC9503 M52055FP
D9501 1SS254
P9001-1, 3 PLAY 1.2Vp-p (20μsec. div)
P9001-5, 7 PLAY 0.3Vp-p (20μsec. div)
P9001-9 PLAY 0.4Vp-p (20μsec. div)
P9001
TBC Y OUT
GND
TBC Y IN
GND
TBC C OUT
GND
TBC C IN
GND
REF OSC
GND
REG 12.3V
NTSC
REG 5V
TO LUMINANCE & CHROMINANCE SECTION P3003 (Page: 4-17/B-8)
Q9001 MSB709 (AMP)
VR9007 1KB TBC SYNC LEVEL
FL9009 VLF0839 5MHz L.P.F
VR9001 2KB TBC OUT LEVEL
Q9003 MSD601 (AMP)
FL9010 VLF0838
Q9004 MSD601 (AMP)
IC9001-35 PLAY 0.5Vp-p (20μsec. div)
IC9001-26 PLAY 0.9Vp-p (20μsec. div)
IC9001-10 PLAY 0.3Vp-p (10msec. div)
IC9001-22 PLAY 3.5Vp-p (20μsec. div)
D/A 1MHz L.P.F
A/D 1MHz L.P.F
FL9011 VLF0874
Q9006 MSD601 (AMP)
Q9007 MSD601 (AMP)
Q9008 MSD601 (INV.)
Q9009 MSD601 (INV.)
IC9001 AN3942SB
S/H
AMP 10DB
A/D VREF
CLAMP
PD CTL
PEAK HOLD
DIOD CLAMP
SYNC SEPA
SYNC MIX
AMP 6dB
GATE
DECODE
BLK COUNT
SYNC GATE
HH KILL
V-BLK START COUNT
MODE SELECT
V OSC
V SYNC SEPA
PC
CERA VCO
1/256
SYNC SEPA
SYNC CLAMP
NOISE GATE
2μSEC MM
IC9002 AN3496S
Q9012 MSD601 (AMP)
Q9013 MSB709 (INV.)
Q9014 2SA1022 (INV.)
QR9007 MRN1404 (EE Ⓡ: ON)
FL9013 ELB4P034 B.P.F
AMP
BG & AMP
BUFFER
BG & LIMIT
NOISE SLICE & ADJ
DL
S/H
(HPF)
DEMOD
2ND L.P.F 2.5MHz
π/2 SHIFT
MOD
CLAMP
FL9014 VLF0875
1.5MHz L.P.F
Q9015 MSD601 (AMP)
Q9016 MSC2295 (BUFFER)
Q9017 MSD601 (AMP)
Q9018 MSB709 (AMP)
Q9019 MSD601 (AMP)
Q9020 MSC2295 (BUFFER)
Q9021 MSD601 (AMP)
Q9022 MSB709 (AMP)
VR9006 10KB WHITE BALANCE 2
VR9005 10KB WHITE BALANCE 1
VR9004 20KB DIGITAL C LEVEL
IC9002-2 PLAY 0.6Vp-p (20μsec. div)
IC9002-3 PLAY 0.3Vp-p (20μsec. div)
IC9002-4 PLAY 0.5Vp-p (20μsec. div)
IC9002-9 PLAY 0.3Vp-p (20μsec. div)

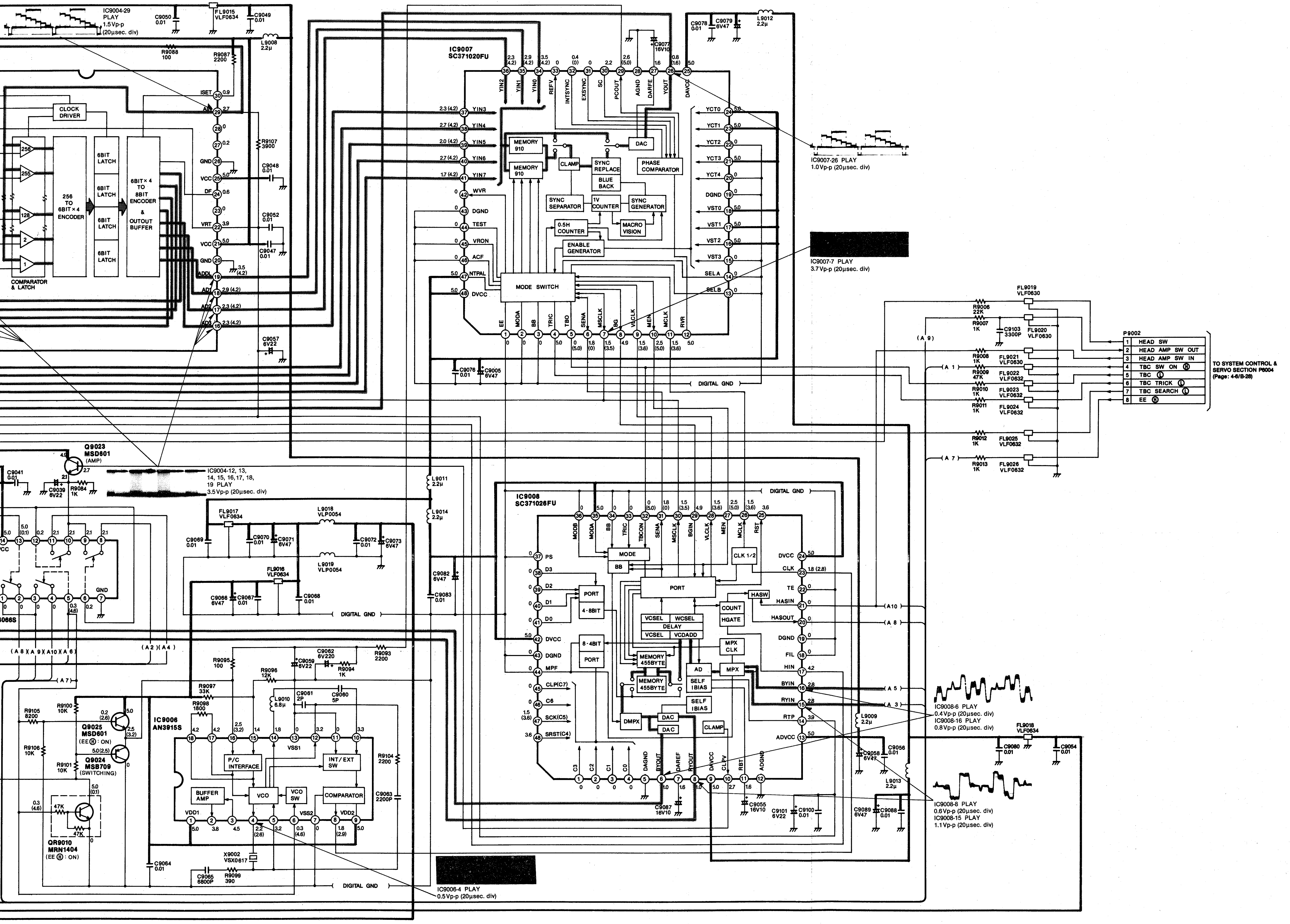
MAIN SIGNAL PATH IN PLAYBACK MODE


IC9001 AN3942SB
IC9002 AN3495S
IC9003 MN74HC4066S
IC9004 HA19211BNT
IC9006 AN3915S
IC9007 SC371020FU
IC9008 SC371026FU
Q9004 MSD601 (AMP)
Q9007 MSD601 (AMP)
Q9008 MSD601 (INV.)
Q9009 MSD601 (INV.)
Q9010 MSB709 (AMP)
Q9011 MSB709 (AMP)
Q9012 MSD601 (AMP)
Q9014 2SA1022 (INV.)
Q9017 MSD601 (AMP)
Q9018 MSB709 (AMP)
Q9021 MSD601 (AMP)
Q9022 MSB709 (AMP)
Q9023 MSD601 (AMP)
Q9024 MSB709 (SWITCHING)
Q9025 MSD601 (EE Ⓗ : ON)
Q9026 MSB709 (AMP)
Q9027 MSB709 (AMP)
QR9001 MRN1404 (TBC SEARCH Ⓗ : OFF)
QR9004 MRN1404 (TBC SEARCH Ⓗ : ON)
QR9010 MRN1404 (EE Ⓗ : ON)
IC9001-10 PLAY 0.3Vp-p (10msec. div)
IC9001-22 PLAY 3.5Vp-p (20µsec. div)
IC9001-16 PLAY 1.0Vp-p (20µsec. div)
IC9001-35 PLAY 0.5Vp-p (20µsec. div)
IC9001-26 PLAY 0.9Vp-p (20µsec. div)
IC9004-29 PLAY 1.5Vp-p (20µsec. div)
IC9004-12, 13, 14, 15, 16, 17, 18, 19 PLAY 3.5Vp-p (20µsec. div)
IC9006-4 PLAY 0.5Vp-p (20µsec. div)
IC9002-2 PLAY 0.6Vp-p (20µsec. div)
IC9002-3 PLAY 0.3Vp-p (20µsec. div)
IC9002-4 PLAY 0.5Vp-p (20µsec. div)
IC9002-9 PLAY 0.3Vp-p (20µsec. div)
IC9002-11 PLAY 0.4Vp-p (20µsec. div)
IC9002-14 PLAY 0.2Vp-p (20µsec. div)
COMPARATOR & LATCH
CLOCK DRIVER
256 TO 6BIT×4 ENCODER
6BIT LATCH
6BIT×4 TO 8BIT ENCODER & OUTOUT BUFFER
MODE SWITCH
MEMORY 910
SYNC SEPARATOR
SYNC GENERATOR
PHASE COMPARATOR
MEMORY 455BYTE
DIGITAL GND
TP9001

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKE
WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) (TBC SW, O
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BR
WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) (TBC SW,

7 8 9 10 11 12 13 14 15 16 17 18 19

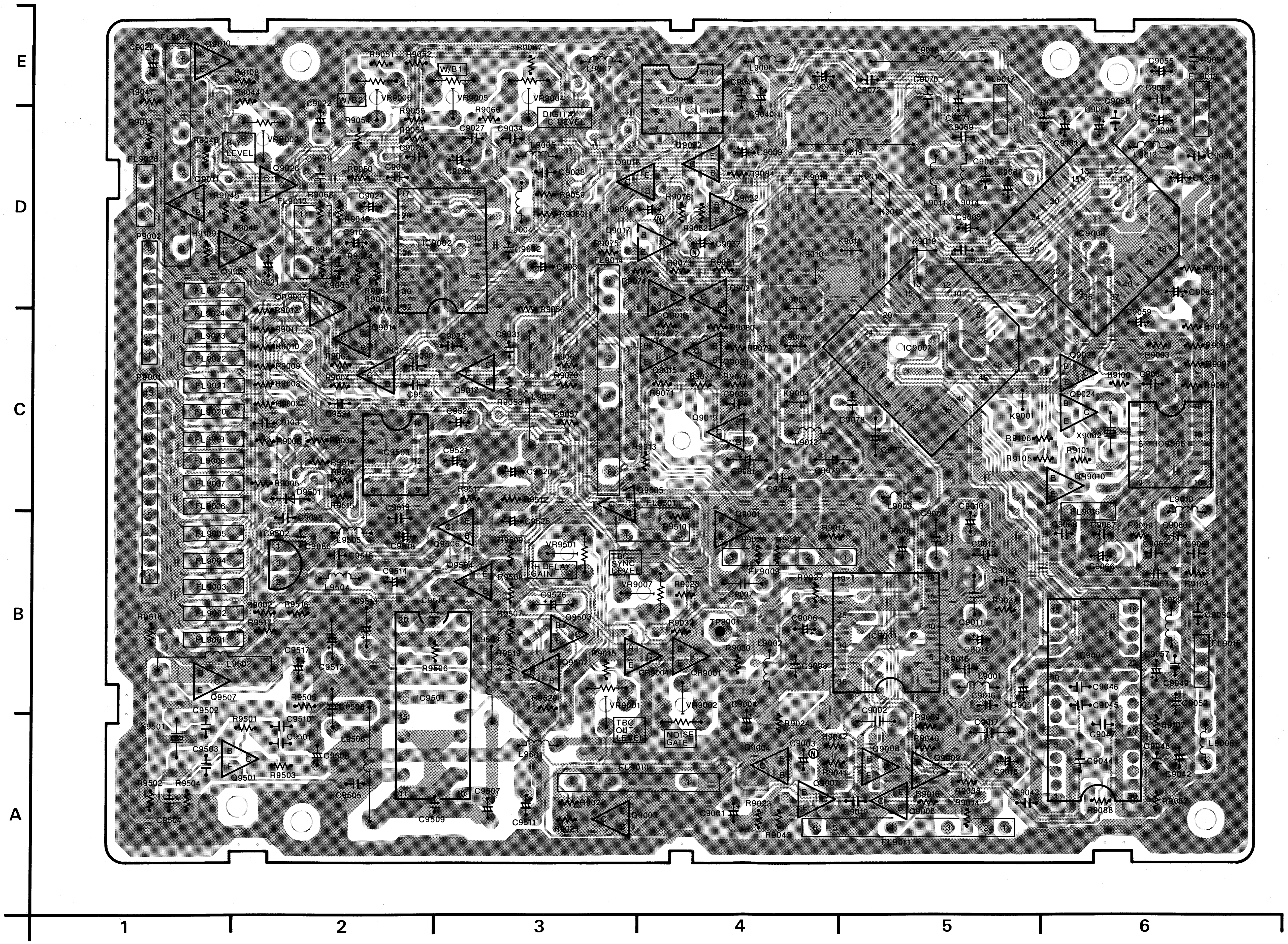
MAIN SIGNAL PATH IN PLAYBACK MODE


IC9004-29 PLAY 1.5Vp-p (20μsec. div)
IC9007 SC371020FU
YIN2
YIN1
YIN0
REFV
INTSYNC
EXSYNC
SC
PCOUT
AGND
DARFE
YOUT
DAVCC
YIN3
YIN4
YIN5
YIN6
YIN7
WVR
DGND
TEST
VRON
ACF
NTPAL
DVCC
MEMORY 910
CLAMP
SYNC REPLACE
BLUE BACK
DAC
PHASE COMPARATOR
SYNC SEPARATOR
1V COUNTER
SYNC GENERATOR
0.5H COUNTER
MACRO VISION
ENABLE GENERATOR
MODE SWITCH
YCT0
YCT1
YCT2
YCT3
YCT4
VST0
VST1
VST2
VST3
SELA
SELB
EE
MODA
BB
TRIC
TBO
SENA
MSCLK
BG
VLCLK
MEN
MCLK
RVR
DIGITAL GND
IC9007-26 PLAY 1.0Vp-p (20μsec. div)
IC9007-7 PLAY 3.7Vp-p (20μsec. div)
CLOCK DRIVER
256 TO 6BIT×4 ENCODER
6BIT LATCH
6BIT×4 TO 8BIT ENCODER & OUTOUT BUFFER
COMPARATOR & LATCH
ISET
VRT
ADDL
IC9004-12, 13, 14, 15, 16, 17, 18, 19 PLAY 3.5Vp-p (20μsec. div)
Q9023 MSD601 (AMP)
Q9025 MSD601 (EE Ⓗ : ON)
Q9024 MSB709 (SWITCHING)
QR9010 MRN1404 (EE Ⓗ : ON)
IC9006 AN3915S
P/C INTERFACE
INT/EXT SW
BUFFER AMP
VCO
VCO SW
COMPARATOR
VDD1
VSS1
VSS2
VDD2
X9002 VSX0617
IC9006-4 PLAY 0.5Vp-p (20μsec. div)
IC9008 SC371026FU
MODE
BB
PORT
4·8BIT
8·4BIT
CLK 1/2
HASW
COUNT
HGATE
VCSEL
WCSEL
DELAY
VCDADD
MEMORY 455BYTE
MPX CLK
AD
MPX
SELF IBIAS
DMPX
DAC
CLAMP
PS
D3
D2
D1
D0
DVCC
DGND
MPF
CLP(C7)
C6
SCK(C5)
SRST(C4)
CLK
TE
HASIN
HASOUT
FIL
HIN
BYIN
RYIN
RTP
ADVCC
BYOUT
DAREF
RYOUT
DAVCC
CLPV
RBT
ADGND
IC9008-6 PLAY 0.4Vp-p (20μsec. div)
IC9008-16 PLAY 0.8Vp-p (20μsec. div)
IC9008-8 PLAY 0.6Vp-p (20μsec. div)
IC9008-15 PLAY 1.1Vp-p (20μsec. div)
P9002
1 HEAD SW
2 HEAD AMP SW OUT
3 HEAD AMP SW IN
4 TBC SW ON Ⓗ
5 TBC Ⓛ
6 TBC TRICK Ⓛ
7 TBC SEARCH Ⓛ
8 EE Ⓗ
TO SYSTEM CONTROL & SERVO SECTION P6004 (Page: 4-6/8-28)
FL9019 VLF0630
FL9020 VLF0630
FL9021 VLF0630
FL9022 VLF0632
FL9023 VLF0632
FL9024 VLF0632
FL9025 VLF0632
FL9026 VLF0632
FL9018 VLF0634
R9006 22K
R9007 1K
R9008 1K
R9009 47K
R9010 1K
R9011 1K
R9012 1K
R9013 1K
C9103 3300P
(A 9)
(A 1)
(A 7)
(A 10)
(A 8)
(A 5)
(A 3)
(A 8)(A 9)(A 10)(A 6)
(A 2)(A 4)

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) (TBC SW, ON)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE) (TBC SW, ON)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-14. TBC C.B.A. (VEP03A53A)


E
D
C
B
A
1
2
3
4
5
6
R-Y LEVEL
W/B1
W/B2
DIGITAL C LEVEL
1H DELAY GAIN
TBC SYNC LEVEL
TBC OUT LEVEL
NOISE GATE
TP9001

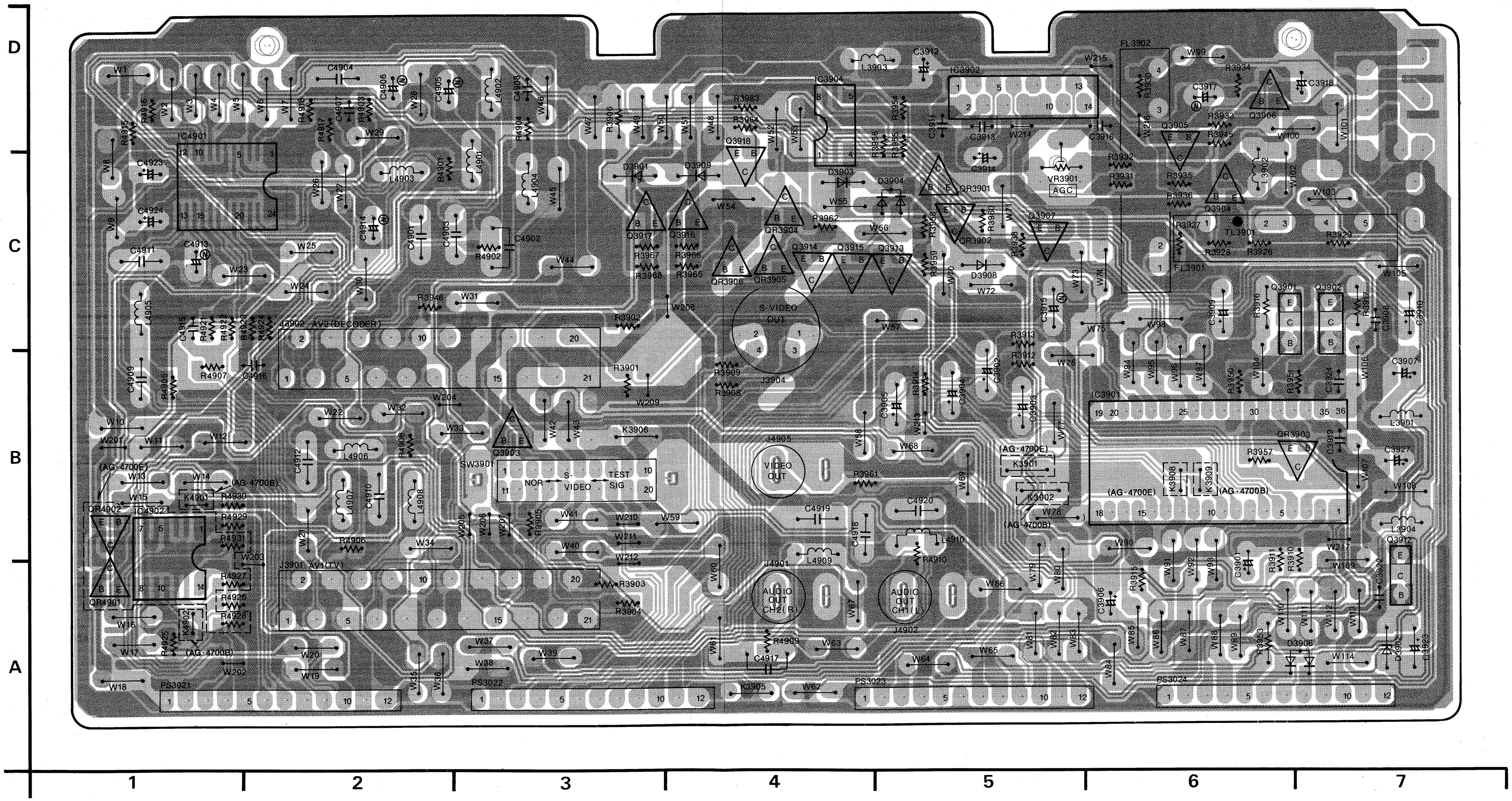
TBC C.B.A.	
Transistor	
Q9001	B-4
Q9003	A-3
Q9004	A-4
Q9006	A-5
Q9007	A-4
Q9008	A-5
Q9009	A-5
Q9010	E-1
Q9011	D-1
Q9012	C-3
Q9013	C-2
Q9014	C-2
Q9015	C-4
Q9016	D-4
Q9017	D-4
Q9018	D-3
Q9019	C-4
Q9020	C-4
Q9021	D-4
Q9022	D-4
Q9023	D-4
Q9024	C-6
Q9025	C-6
Q9026	D-2
Q9027	D-2
Q9501	A-2
Q9502	B-3
Q9503	B-3
Q9504	B-3
Q9505	C-3
Q9506	B-3
Q9507	B-1
Transistor & Resistor	
QR9001	B-4
QR9004	B-4
QR9007	D-2
QR9010	C-6
Integrated Circuit	
IC9001	B-5
IC9002	D-3
IC9003	E-4
IC9004	B-6
IC9006	C-6
IC9007	C-5
IC9008	D-6
IC9501	B-2
IC9502	B-2
IC9503	C-2
Test Point	
TP9001	B-4
Adjustment	
VR9001	B-3
VR9002	B-4
VR9003	D-2
VR9004	E-3
VR9005	E-3
VR9006	E-2
VR9007	B-4
VR9501	B-3
Connector	
P9001	C-1
P9002	D-1

ADDRESS INFORMATION

4-15. INPUT/OUTPUT PACK C.B.A. (VEP03A72A: AG-4700E) (VEP03A72D: AG-4700B)

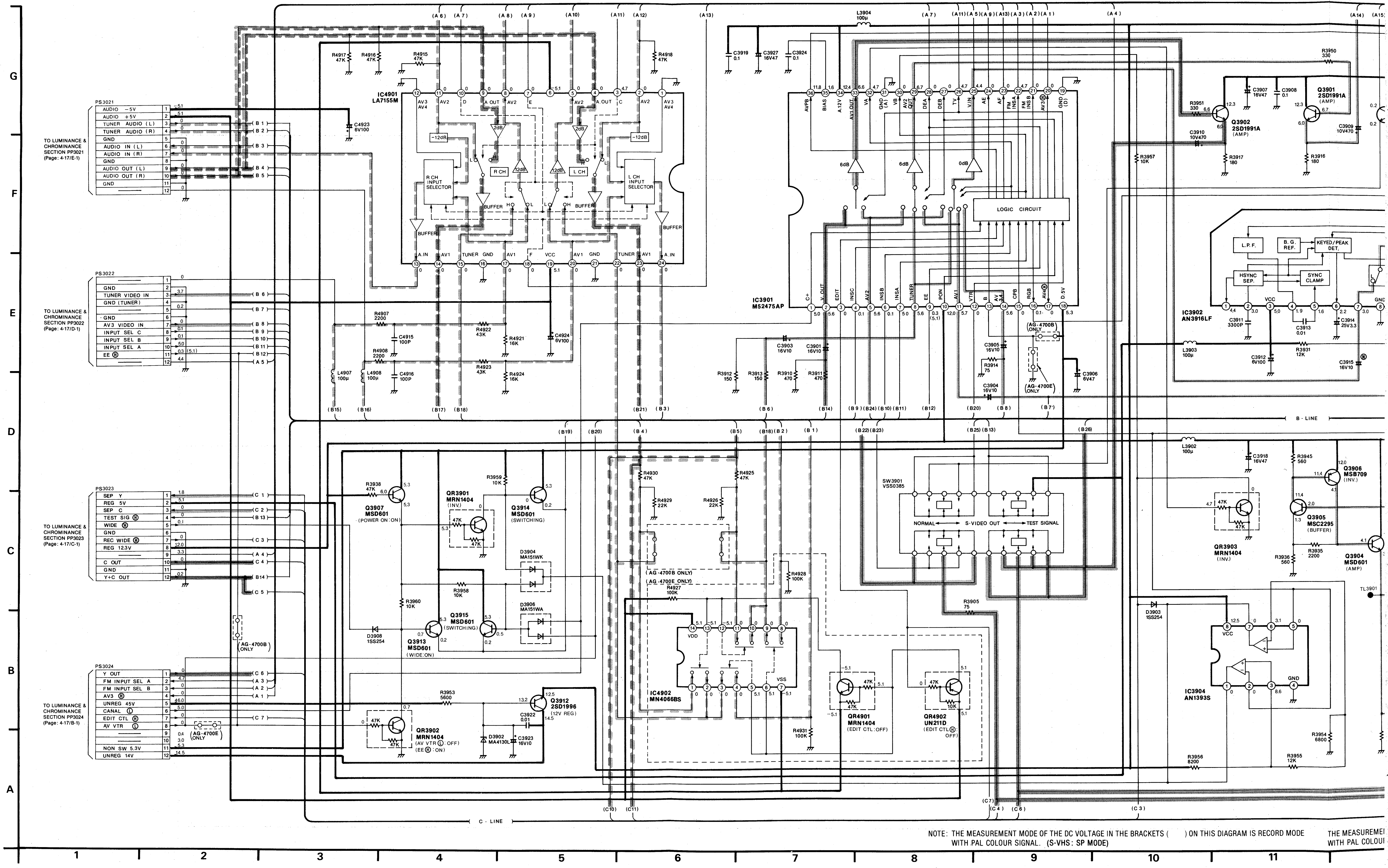
INPUT/OUTPUT PACK C.B.A.					
Transistor		**Transistor & Resistor**		**Adjustment**	
Q3901	C-6	QR3901	C-5	VR3901	C-5
Q3902	C-7	QR3902	C-5	**Connector**	
Q3903	B-3	QR3903	B-7	PS3021	A-1
Q3904	C-6	QR3904	C-4	PS3022	A-3
Q3905	D-6	QR3905	C-4	PS3023	A-5
Q3906	D-6	QR3906	C-4	PS3024	A-6
Q3907	C-5	QR4901	A-1		
Q3912	B-7	QR4902	B-1		
Q3913	C-5	**Integrated Circuit**			
Q3914	C-4	IC3901	B-6		
Q3915	C-4	IC3902	D-5		
Q3916	C-4	IC3904	D-4		
Q3917	C-3	IC4901	C-1		
Q3918	C-4	IC4902	B-1		

ADDRESS INFORMATION


D
C
B
A
1
2
3
4
5
6
7
IC4901
IC4902
IC3901
IC3902
IC3904
J3902 AV2 (DECODER)
J3901 AV1 (TV)
J3904
S-VIDEO OUT
J4905
VIDEO OUT
J4901
AUDIO OUT CH2 (R)
J4902
AUDIO OUT CH1 (L)
SW3901
NOR
S-VIDEO
TEST SIG
VR3901
AGC
FL3901
FL3902
TL3901
PS3021
PS3022
PS3023
PS3024
(AG-4700E)
(AG-4700B)
QR4901
QR4902
Q3903
Q3917
Q3916
Q3918
Q3914
Q3915
Q3913
QR3904
QR3905
QR3906
QR3901
QR3902
QR3903
Q3907
Q3905
Q3906
Q3904
Q3901
Q3902
Q3912
K3901
K3902
K3905
K3906
K3908
K3909
K4901
K4902

4-16. INPUT/OUTPUT PACK SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC
AUDIO MAIN SIGNAL PATH IN PLA

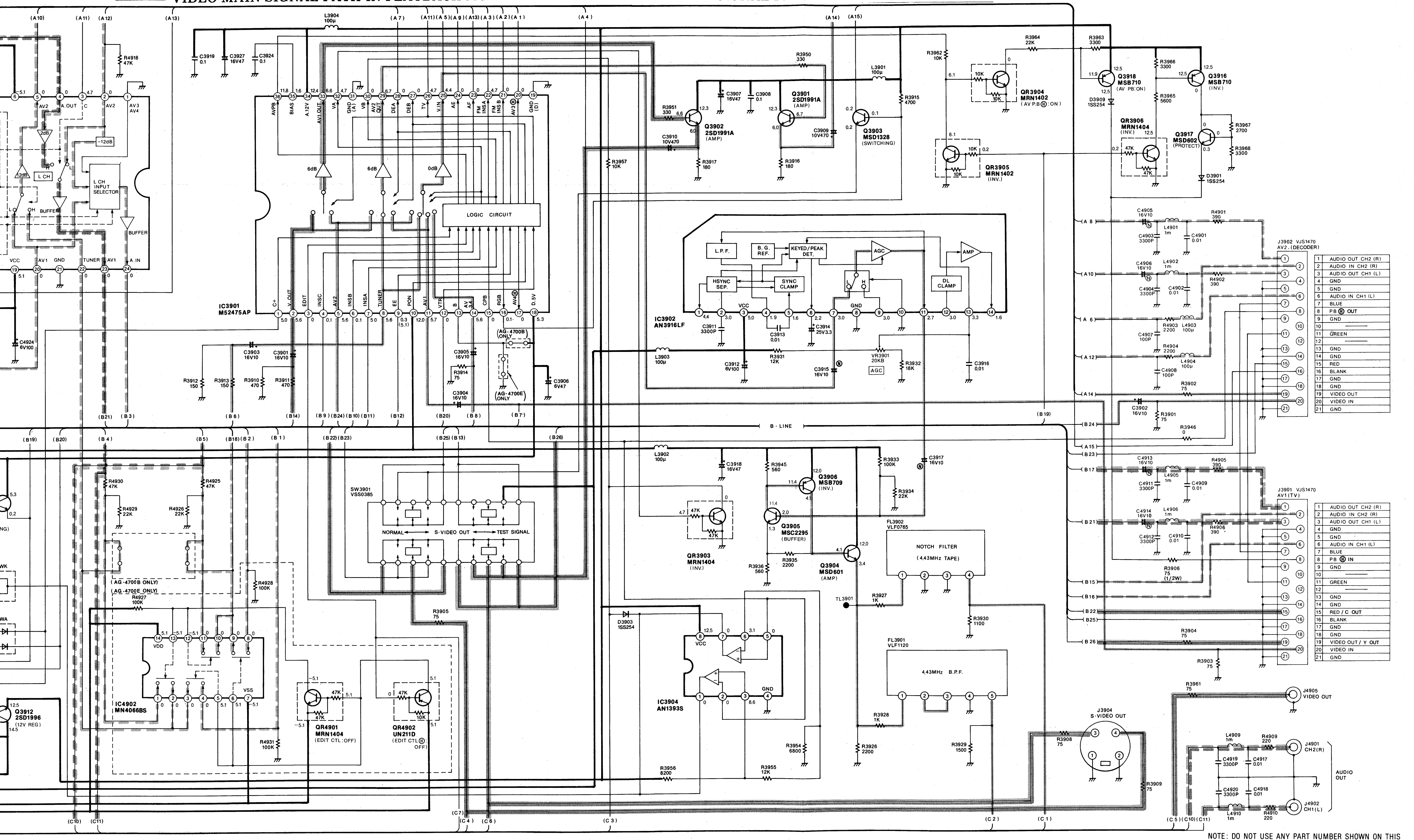


G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
PS3021
AUDIO -5V
AUDIO +5V
TUNER AUDIO (L)
TUNER AUDIO (R)
GND
AUDIO IN (L)
AUDIO IN (R)
GND
AUDIO OUT (L)
AUDIO OUT (R)
GND
TO LUMINANCE & CHROMINANCE SECTION PP3021 (Page: 4-17/E-1)
PS3022
GND
TUNER VIDEO IN
GND (TUNER)
GND
AV3 VIDEO IN
INPUT SEL C
INPUT SEL B
INPUT SEL A
EE Ⓡ
TO LUMINANCE & CHROMINANCE SECTION PP3022 (Page: 4-17/D-1)
PS3023
SEP Y
REG 5V
SEP C
TEST SIG Ⓡ
WIDE Ⓡ
GND
REC WIDE Ⓡ
REG 12.3V
C OUT
GND
Y+C OUT
TO LUMINANCE & CHROMINANCE SECTION PP3023 (Page: 4-17/C-1)
PS3024
Y OUT
FM INPUT SEL A
FM INPUT SEL B
AV3 Ⓡ
UNREG 45V
CANAL Ⓛ
EDIT CTL Ⓡ
AV VTR Ⓛ
NON SW 5.3V
UNREG 14V
TO LUMINANCE & CHROMINANCE SECTION PP3024 (Page: 4-17/B-1)
IC4901
LA7155M
R CH INPUT SELECTOR
L CH INPUT SELECTOR
BUFFER
R CH
L CH
-12dB
2dB
12dB
IC3901
M52475AP
LOGIC CIRCUIT
6dB
0dB
IC3902
AN3916LF
L.P.F.
B.G. REF.
KEYED/PEAK DET.
HSYNC SEP.
SYNC CLAMP
Q3901
2SD1991A
(AMP)
Q3902
2SD1991A
(AMP)
L3904
100μ
Q3907
MSD601
(POWER ON:ON)
QR3901
MRN1404
(INV.)
Q3914
MSD601
(SWITCHING)
D3904
MA151WK
D3906
MA151WA
Q3915
MSD601
(SWITCHING)
Q3913
MSD601
(WIDE:ON)
D3908
1SS254
QR3902
MRN1404
(AV VTR Ⓛ:OFF)
(EE Ⓡ:ON)
Q3912
2SD1996
(12V REG)
D3902
MA4130L
(AG-4700B ONLY)
(AG-4700E ONLY)
IC4902
MN4066BS
QR4901
MRN1404
(EDIT CTL:OFF)
QR4902
UN211D
(EDIT CTL Ⓡ:OFF)
SW3901
VSS0385
NORMAL
S-VIDEO OUT
TEST SIGNAL
Q3906
MSB709
(INV.)
Q3905
MSC2295
(BUFFER)
QR3903
MRN1404
(INV.)
Q3904
MSD601
(AMP)
IC3904
AN1393S
D3903
1SS254
TL3901
B - LINE
C - LINE

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREME
WITH PAL COLOU

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

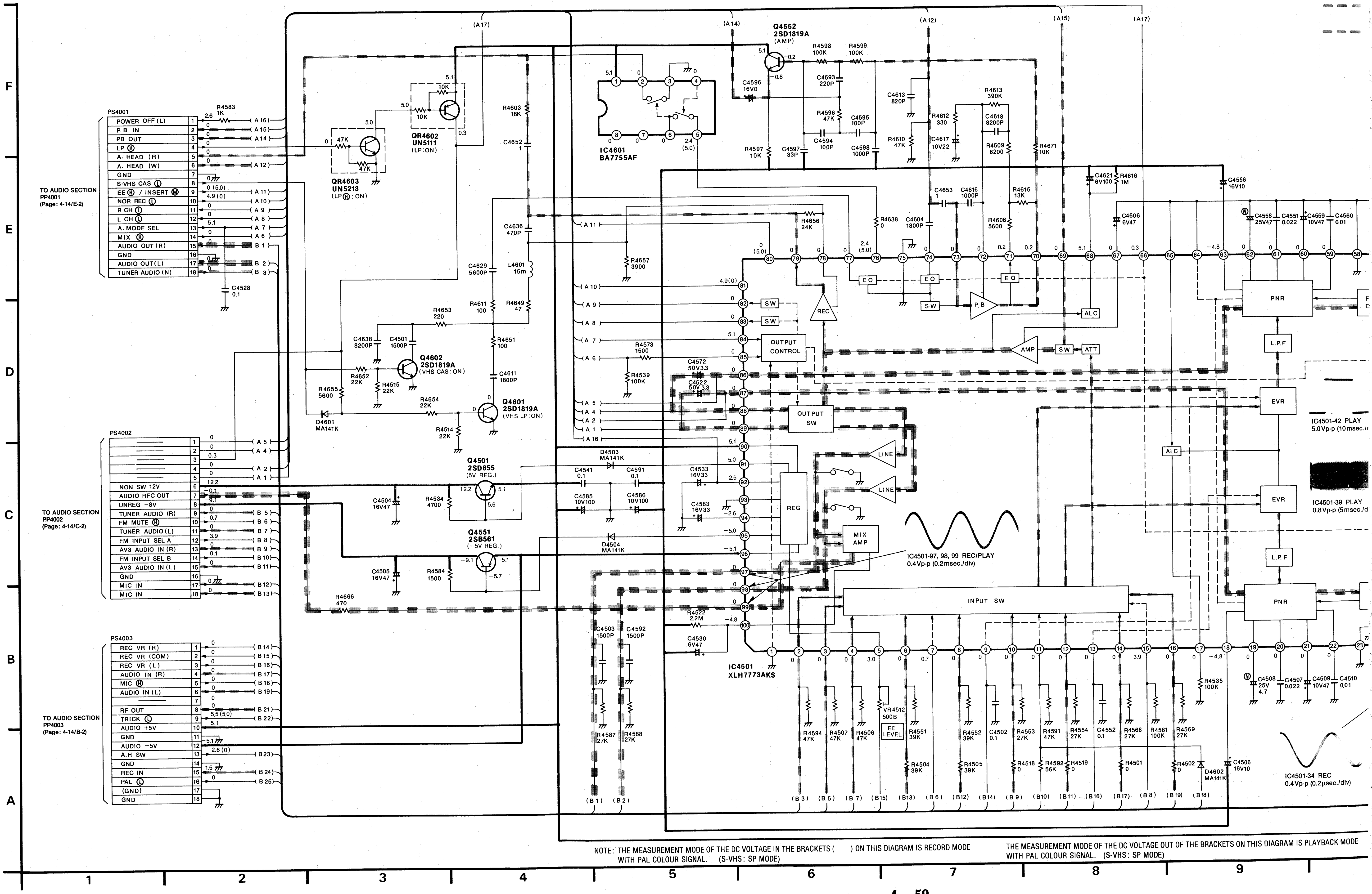

IC3901 M52475AP
IC3902 AN3916LF
IC3904 AN1393S
IC4902 MN4066BS
LOGIC CIRCUIT
L.CH INPUT SELECTOR
BUFFER
L.P.F.
B.G. REF.
KEYED/PEAK DET.
AGC
AMP
HSYNC SEP.
SYNC CLAMP
DL CLAMP
Q3901 2SD1991A (AMP)
Q3902 2SD1991A (AMP)
Q3903 MSD1328 (SWITCHING)
QR3904 MRN1402 (AV P.B Ⓗ: ON)
QR3905 MRN1402 (INV.)
QR3906 MRN1404 (INV.)
Q3916 MSB710 (INV.)
Q3917 MSD602 (PROTECT)
Q3918 MSB710 (AV PB:ON)
D3909 1SS254
D3901 1SS254
D3903 1SS254
SW3901 VSS0385
NORMAL ← S-VIDEO OUT → TEST SIGNAL
(AG-4700B ONLY)
(AG-4700E ONLY)
Q3905 MSC2295 (BUFFER)
Q3906 MSB709 (INV.)
Q3904 MSD601 (AMP)
QR3903 MRN1404 (INV.)
FL3902 VLF0765 NOTCH FILTER (4.43MHz TAPE)
FL3901 VLF1120 4.43MHz B.P.F.
TL3901
QR4901 MRN1404 (EDIT CTL:OFF)
QR4902 UN211D (EDIT CTL Ⓗ: OFF)
Q3912 2SD1996 (12V REG)
B-LINE
J3902 VJS1470 AV2.(DECODER)
1 AUDIO OUT CH2 (R)
2 AUDIO IN CH2 (R)
3 AUDIO OUT CH1 (L)
4 GND
5 GND
6 AUDIO IN CH1 (L)
7 BLUE
8 PB Ⓝ OUT
9 GND
10
11 GREEN
12
13 GND
14 GND
15 RED
16 BLANK
17 GND
18 GND
19 VIDEO OUT
20 VIDEO IN
21 GND
J3901 VJS1470 AV1(TV)
1 AUDIO OUT CH2 (R)
2 AUDIO IN CH2 (R)
3 AUDIO OUT CH1 (L)
4 GND
5 GND
6 AUDIO IN CH1 (L)
7 BLUE
8 PB Ⓗ IN
9 GND
10
11 GREEN
12
13 GND
14 GND
15 RED / C OUT
16 BLANK
17 GND
18 GND
19 VIDEO OUT / Y OUT
20 VIDEO IN
21 GND
J3904 S-VIDEO OUT
J4905 VIDEO OUT
J4901 CH2(R)
J4902 CH1(L)
AUDIO OUT
5
6
7
8
9
10
11
12
13
14
15
16

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

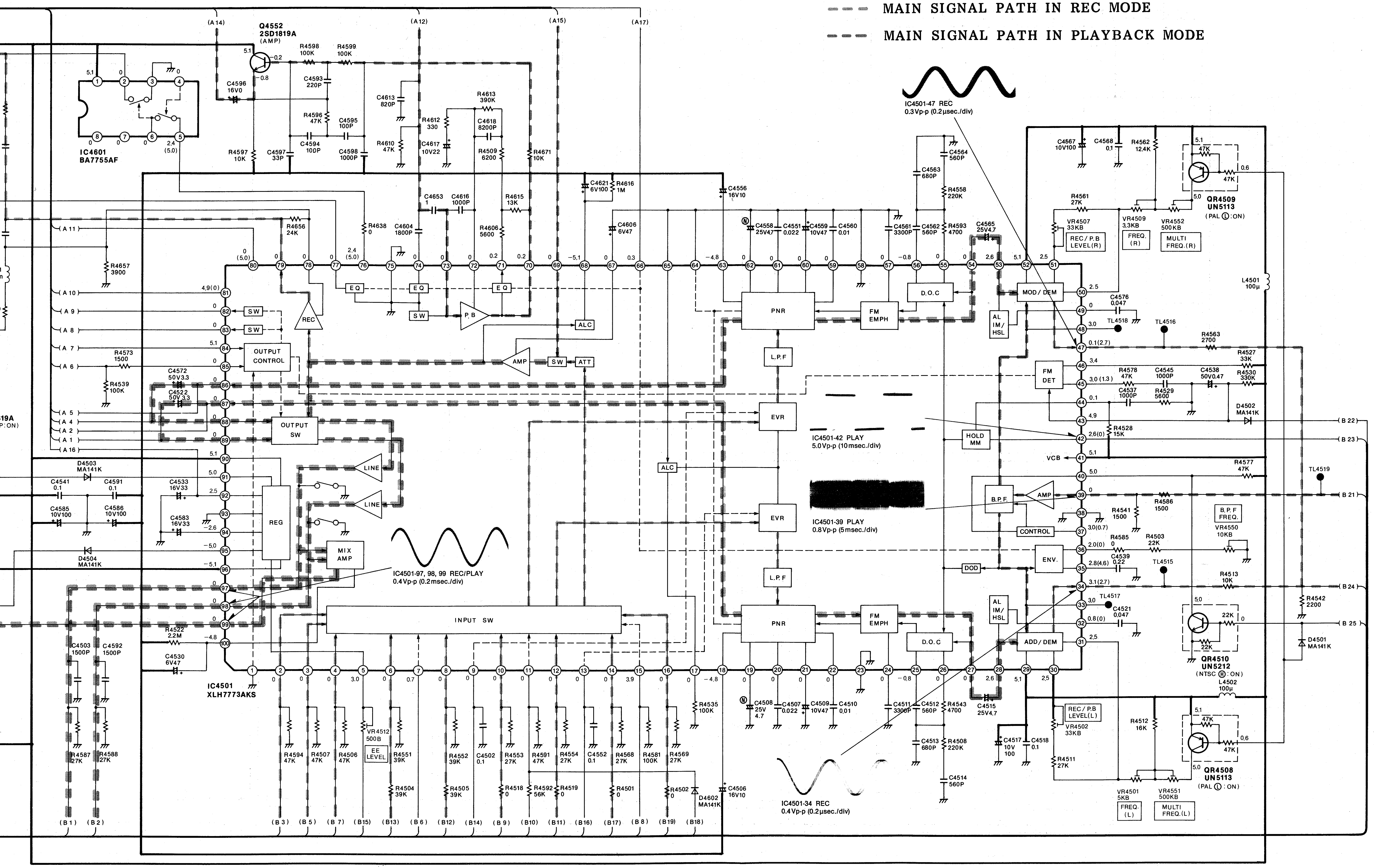
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-17. Hi-Fi AUDIO PACK SCHEMATIC DIAGRAM


F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
PS4001
POWER OFF (L)
P.B IN
PB OUT
LP Ⓗ
A. HEAD (R)
A. HEAD (W)
GND
S-VHS CAS Ⓛ
EE Ⓗ / INSERT Ⓜ
NOR REC Ⓛ
R CH Ⓛ
L CH Ⓛ
A. MODE SEL
MIX Ⓗ
AUDIO OUT (R)
GND
AUDIO OUT (L)
TUNER AUDIO (N)
TO AUDIO SECTION PP4001 (Page: 4-14/E-2)
PS4002
NON SW 12V
AUDIO RFC OUT
UNREG -8V
TUNER AUDIO (R)
FM MUTE Ⓗ
TUNER AUDIO (L)
FM INPUT SEL A
AV3 AUDIO IN (R)
FM INPUT SEL B
AV3 AUDIO IN (L)
GND
MIC IN
MIC IN
TO AUDIO SECTION PP4002 (Page: 4-14/C-2)
PS4003
REC VR (R)
REC VR (COM)
REC VR (L)
AUDIO IN (R)
MIC Ⓗ
AUDIO IN (L)
RF OUT
TRICK Ⓛ
AUDIO +5V
GND
AUDIO -5V
A.H SW
GND
REC IN
PAL Ⓛ
(GND)
GND
TO AUDIO SECTION PP4003 (Page: 4-14/B-2)
R4583 1K
C4528 0.1
QR4603 UN5213 (LP Ⓗ : ON)
QR4602 UN5111 (LP:ON)
Q4602 2SD1819A (VHS CAS:ON)
Q4601 2SD1819A (VHS LP:ON)
D4601 MA141K
R4655 5600
R4652 22K
R4515 22K
R4654 22K
R4514 22K
C4638 8200P
C4501 1500P
R4653 220
R4611 100
R4649 47
R4651 100
C4611 1800P
C4629 5600P
L4601 15m
C4636 470P
C4652 1
R4603 18K
Q4501 2SD655 (5V REG.)
Q4551 2SB561 (-5V REG.)
C4504 16V47
R4534 4700
C4505 16V47
R4584 1500
R4666 470
IC4601 BA7755AF
Q4552 2SD1819A (AMP)
C4596 16V0
R4598 100K
R4599 100K
C4593 220P
R4596 47K
C4595 100P
C4594 100P
C4598 1000P
R4597 10K
C4597 33P
C4613 820P
R4612 330
C4617 10V22
R4610 47K
R4613 390K
C4618 8200P
R4509 6200
R4671 10K
C4621 6V100
R4616 1M
C4556 16V10
C4653 1
C4616 1000P
R4615 13K
R4606 5600
C4604 1800P
R4638 0
R4656 24K
R4657 3900
C4606 6V47
C4558 25V47
C4551 0.022
C4559 10V47
C4560 0.01
EQ
SW
P.B
REC
ALC
AMP
ATT
PNR
L.P.F
EVR
OUTPUT CONTROL
OUTPUT SW
LINE
REG
MIX AMP
INPUT SW
R4573 1500
R4539 100K
C4572 50V3.3
C4522 50V3.3
D4503 MA141K
C4541 0.1
C4591 0.1
C4585 10V100
C4586 10V100
D4504 MA141K
C4533 16V33
C4583 16V33
R4522 2.2M
C4530 6V47
C4503 1500P
C4592 1500P
R4587 27K
R4588 27K
IC4501 XLH7773AKS
IC4501-97, 98, 99 REC/PLAY 0.4Vp-p (0.2msec./div)
IC4501-42 PLAY 5.0Vp-p (10msec./
IC4501-39 PLAY 0.8Vp-p (5msec./d
IC4501-34 REC 0.4Vp-p (0.2μsec./div)
VR4512 500B
EE LEVEL
R4594 47K
R4507 47K
R4506 47K
R4551 39K
R4504 39K
R4552 39K
C4502 0.1
R4505 39K
R4553 27K
R4518 0
R4591 47K
R4592 56K
R4554 27K
R4519 0
C4552 0.1
R4568 27K
R4501 0
R4581 100K
R4569 27K
R4502 0
D4602 MA141K
C4506 16V10
R4535 100K
C4508 25V 4.7
C4507 0.022
C4509 10V47
C4510 0.01
(A17)
(A14)
(A12)
(A15)
(B1)
(B2)
(B3)
(B5)
(B7)
(B15)
(B13)
(B6)
(B12)
(B14)
(B9)
(B10)
(B11)
(B16)
(B17)
(B8)
(B19)
(B18)

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)


IC4601
BA7755AF
Q4552
2SD1819A
(AMP)
R4598 100K
R4599 100K
C4593 220P
C4596 16V0
R4596 47K
C4595 100P
C4594 100P
R4597 10K
C4597 33P
C4598 1000P
C4613 820P
R4612 330
R4610 47K
C4617 10V22
R4613 390K
C4618 8200P
R4509 6200
R4671 10K
C4653 1
C4616 1000P
R4615 13K
R4606 5600
C4604 1800P
R4638 0
R4656 24K
C4621 6V100
R4616 1M
C4606 6V47
C4556 16V10
R4657 3900
R4573 1500
R4539 100K
C4572 50V3.3
C4522 50V3.3
(A 14)
(A 12)
(A 15)
(A 17)
(A 11)
(A 10)
(A 9)
(A 8)
(A 7)
(A 6)
(A 5)
(A 4)
(A 2)
(A 1)
(A 16)
OUTPUT CONTROL
OUTPUT SW
REC
SW
EQ
P.B
AMP
ATT
ALC
REG
LINE
MIX AMP
INPUT SW
PNR
L.P.F
EVR
FM EMPH
D.O.C
MOD/DEM
AL IM/HSL
FM DET
HOLD MM
B.P.F.
CONTROL
ENV.
DOD
ADD/DEM
VCB
D4503 MA141K
C4541 0.1
C4591 0.1
C4585 10V100
C4586 10V100
D4504 MA141K
C4533 16V33
C4583 16V33
R4522 2.2M
C4530 6V47
C4503 1500P
C4592 1500P
R4587 27K
R4588 27K
IC4501
XLH7773AKS
R4594 47K
R4507 47K
R4506 47K
VR4512 500B
EE LEVEL
R4551 39K
R4504 39K
R4552 39K
C4502 0.1
R4505 39K
R4553 27K
R4591 47K
R4554 27K
C4552 0.1
R4568 27K
R4581 100K
R4569 27K
R4518 0
R4592 56K
R4519 0
R4501 0
R4502 0
D4602 MA141K
C4506 16V10
R4535 100K
C4508 25V 4.7
C4507 0.022
C4509 10V47
C4510 0.01
C4511 3300P
C4512 560P
R4543 4700
C4513 680P
R4508 220K
C4514 560P
C4515 25V4.7
C4517 10V 100
C4518 0.1
R4511 27K
VR4502 33KB
REC/P.B LEVEL(L)
R4512 16K
QR4508
UN5113
(PAL Ⓛ:ON)
VR4501 5KB
FREQ. (L)
VR4551 500KB
MULTI FREQ.(L)
L4502 100µ
QR4510
UN5212
(NTSC Ⓗ:ON)
D4501 MA141K
R4542 2200
R4513 10K
TL4515
VR4550 10KB
B.P.F FREQ.
R4503 22K
R4585 0
C4539 0.22
R4541 1500
R4586 1500
TL4519
R4577 47K
R4528 15K
D4502 MA141K
R4537 1000P
R4529 5600
R4578 47K
C4545 1000P
C4538 50V0.47
R4527 33K
R4530 330K
R4563 2700
TL4516
TL4518
TL4517
C4521 0.047
C4576 0.047
L4501 100µ
C4567 10V100
C4568 0.1
R4562 12.4K
QR4509
UN5113
(PAL Ⓛ:ON)
R4561 27K
VR4507 33KB
REC/P.B LEVEL(R)
VR4509 3.3KB
FREQ. (R)
VR4552 500KB
MULTI FREQ.(R)
C4563 680P
C4564 560P
R4558 220K
C4561 3300P
C4562 560P
R4593 4700
C4565 25V4.7
C4558 25V47
C4551 0.022
C4559 10V47
C4560 0.01
(B 1)
(B 2)
(B 3)
(B 5)
(B 7)
(B15)
(B13)
(B 6)
(B12)
(B14)
(B 9)
(B10)
(B11)
(B16)
(B17)
(B 8)
(B19)
(B18)
(B 22)
(B 23)
(B 21)
(B 24)
(B 25)
5
6
7
8
9
10
11
12
13

MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE

IC4501-47 REC
0.3Vp-p (0.2µsec./div)

IC4501-42 PLAY
5.0Vp-p (10msec./div)

IC4501-39 PLAY
0.8Vp-p (5msec./div)

IC4501-97, 98, 99 REC/PLAY
0.4Vp-p (0.2msec./div)

IC4501-34 REC
0.4Vp-p (0.2µsec./div)

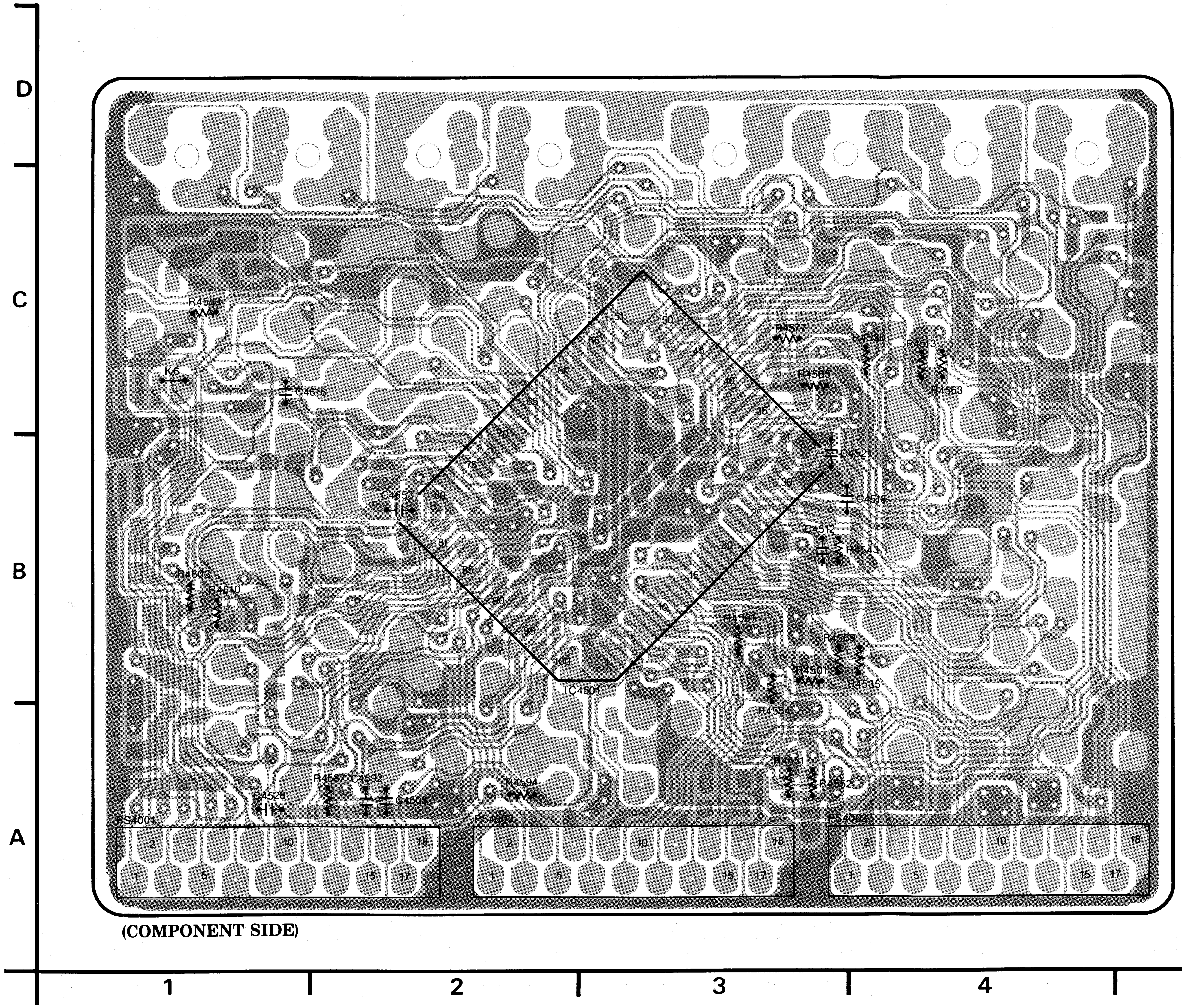
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

• LINE IN SIGNAL LEVEL…−10dB 1kHz

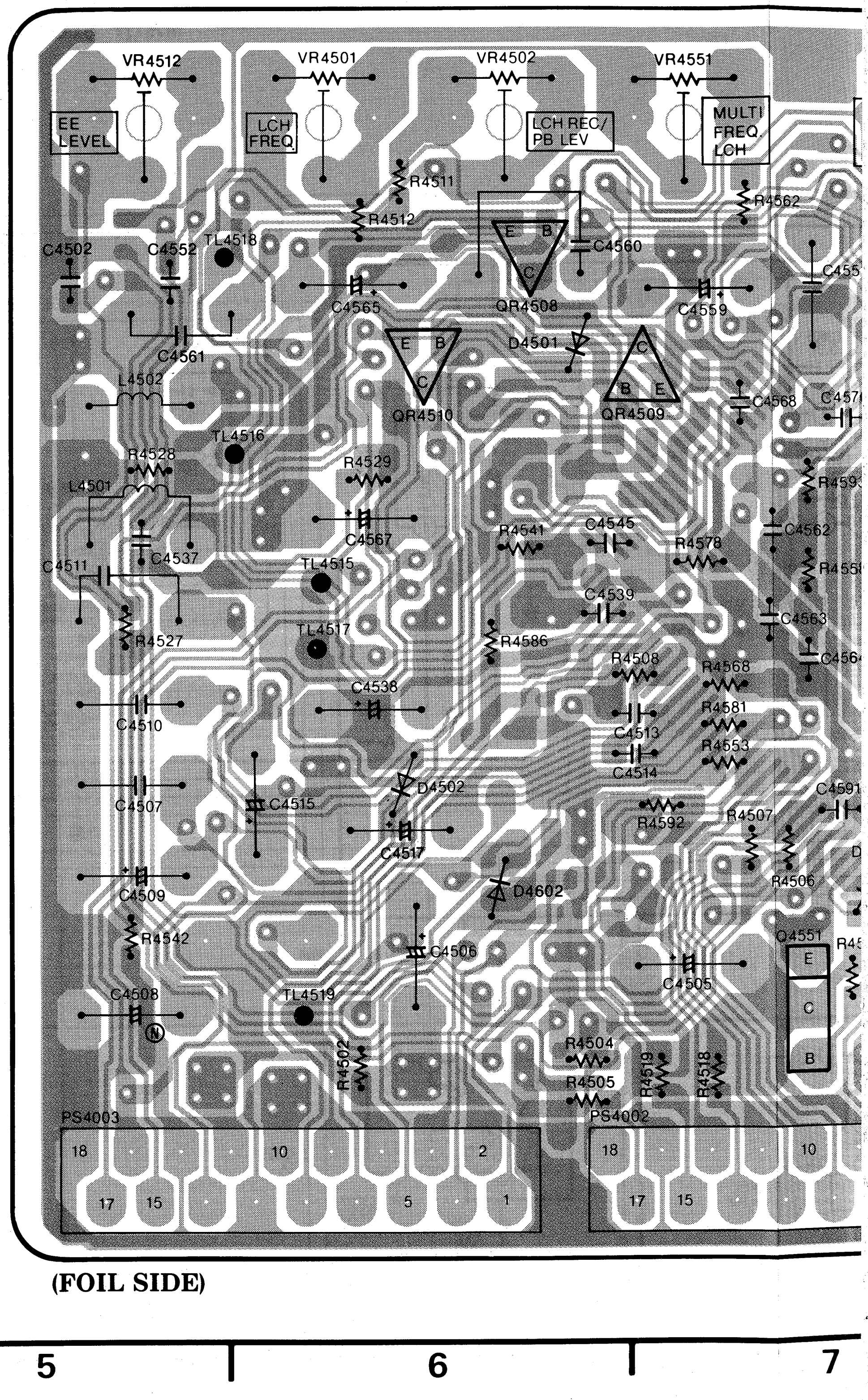
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-18. Hi-Fi AUDIO PACK C.B.A. (VEP04447E)



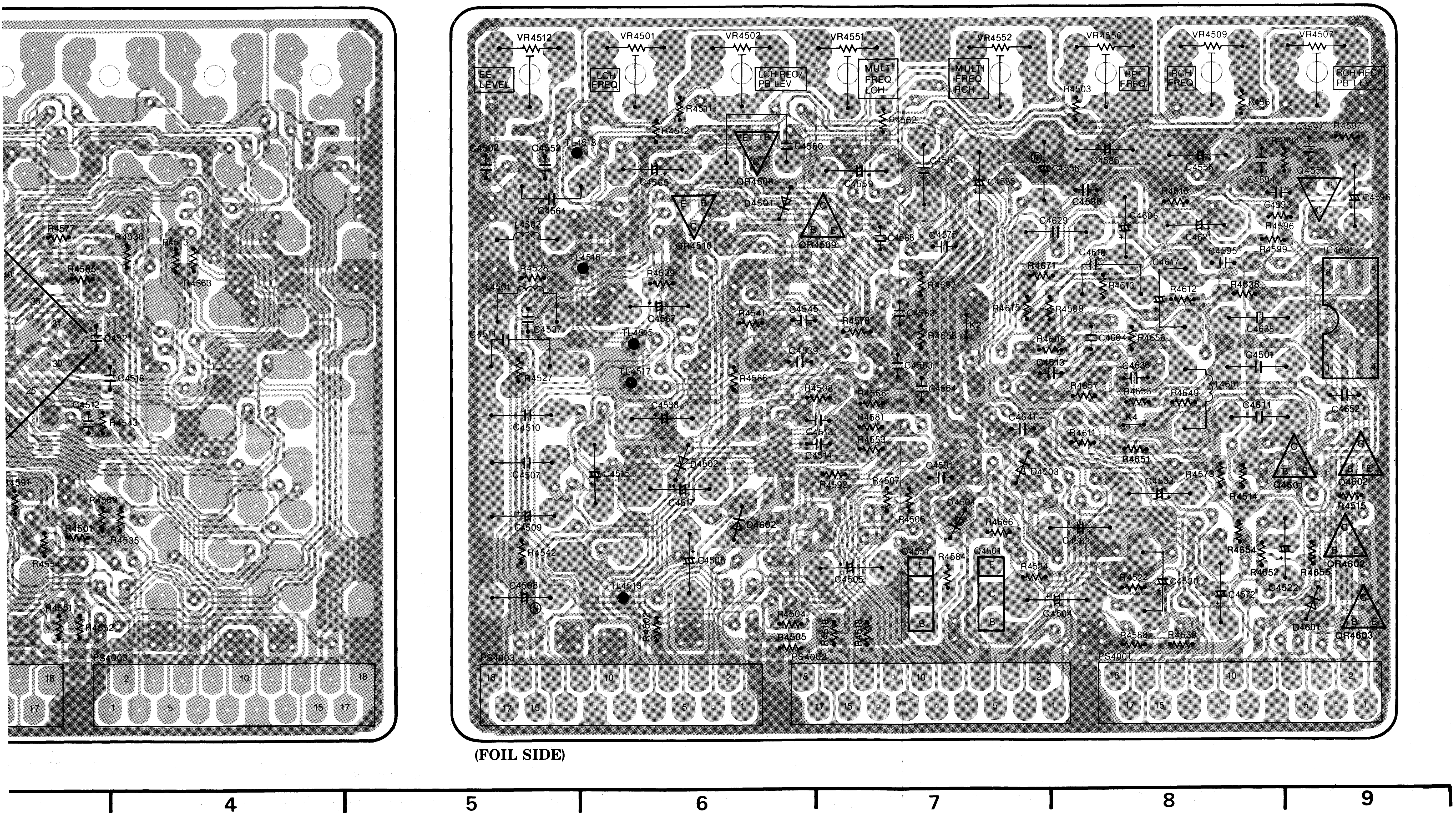
D
C
B
A
1
2
3
4
R4583
K6
C4616
C4653
IC4501
R4603
R4610
C4528
R4587
C4592
C4503
R4594
R4577
R4530
R4513
R4563
R4585
C4521
C4518
C4512
R4543
R4591
R4569
R4535
R4501
R4554
R4551
R4552
PS4001
PS4002
PS4003

(COMPONENT SIDE)



5
6
7
VR4512
VR4501
VR4502
VR4551
EE LEVEL
LCH FREQ
LCH REC/ PB LEV
MULTI FREQ. LCH
R4511
R4512
R4562
C4502
C4552
TL4518
C4560
C4565
QR4508
C4559
C4561
D4501
L4502
QR4510
QR4509
C4568
TL4516
R4528
R4529
L4501
C4567
R4541
C4545
R4578
C4537
C4511
TL4515
C4539
R4527
TL4517
R4586
R4508
R4568
C4538
R4581
C4510
C4513
R4553
C4514
C4515
D4502
R4592
R4507
C4507
C4517
R4506
C4509
D4602
Q4551
R4542
C4506
C4505
C4508
TL4519
R4502
R4504
R4505
R4519
R4518
PS4003
PS4002

(FOIL SIDE)

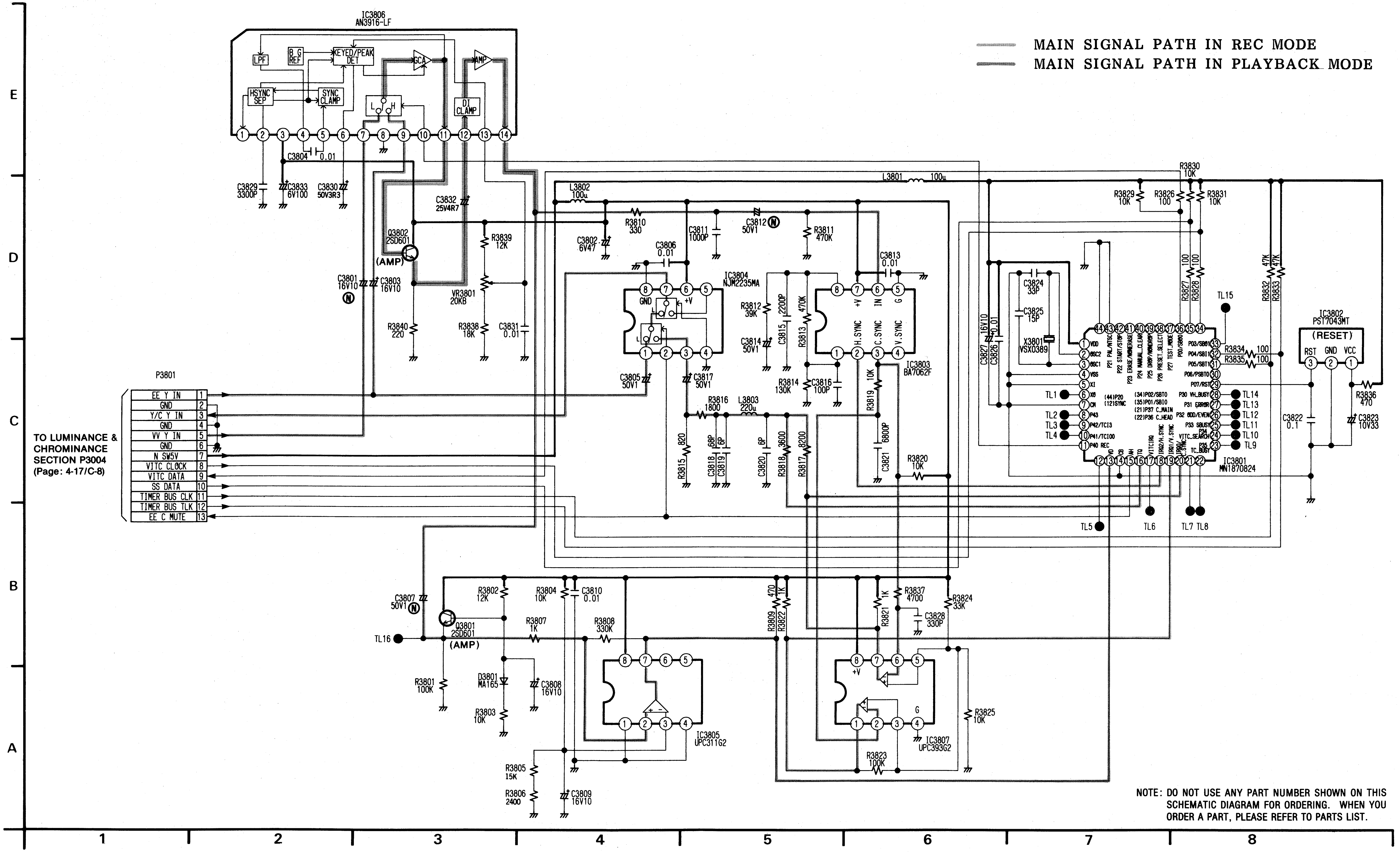

VR4512
VR4501
VR4502
VR4551
VR4552
VR4550
VR4509
VR4507
EE LEVEL
LCH FREQ
LCH REC/ PB LEV
MULTI FREQ. LCH
MULTI FREQ. RCH
BPF FREQ.
RCH FREQ
RCH REC/ PB LEV
QR4508
QR4509
QR4510
Q4552
Q4601
Q4602
QR4602
QR4603
Q4551
Q4501
IC4601
TL4518
TL4516
TL4515
TL4517
TL4519
D4501
D4502
D4503
D4504
D4601
D4602
L4501
L4502
L4601
K2
K4
PS4001
PS4002
PS4003
4
5
6
7
8
9

(FOIL SIDE)

Hi-Fi AUDIO PACK C.B.A.	
Transistor	
Q4501	A-7
Q4551	A-7
Q4552	C-9
Q4601	B-9
Q4602	B-9
Transistor & Resistor	
QR4508	C-6
QR4509	C-7
QR4510	C-6
QR4602	A-9
QR4603	A-9
Integrated Circuit	
IC4501	B-3
IC4601	C-9
Adjustment	
VR4501	D-6
VR4502	D-6
VR4507	D-9
VR4509	D-8
VR4512	D-5
VR4550	D-8
VR4551	D-7
VR4552	D-7
Connector	
PS4001	A-1
PS4001	A-8
PS4002	A-2
PS4002	A-7
PS4003	A-4
PS4003	A-5

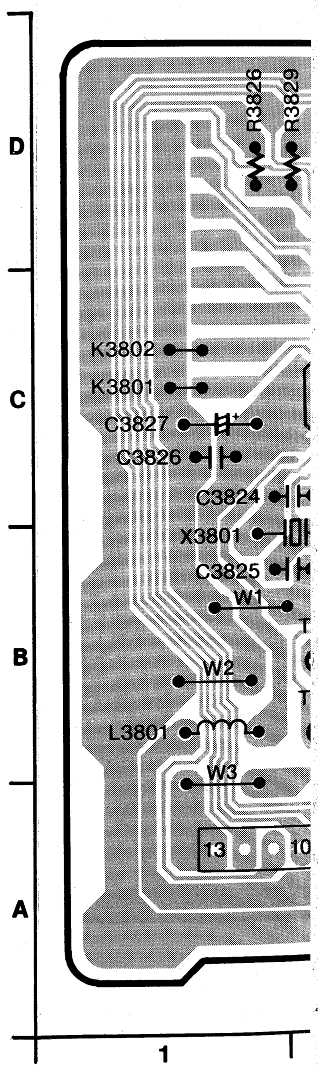
ADDRESS INFORMATION

4-19. VITC SCHEMATIC DIAGRAM


MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE
IC3806
AN3916-LF
LPF
B.G REF
KEYED/PEAK DET
GCA
AMP
HSYNC SEP
SYNC CLAMP
DI CLAMP
C3804 0.01
C3829 3300P
C3833 6V100
C3830 50V3R3
C3832 25V4R7
Q3802 2SD601
(AMP)
R3839 12K
C3801 16V10
C3803 16V10
VR3801 20KB
R3840 220
R3838 18K
C3831 0.01
L3802 100u
C3802 6V47
R3810 330
C3806 0.01
C3811 1000P
C3812 50V1
R3811 470K
C3813 0.01
IC3804 NJM2235MA
GND
+V
R3812 39K
C3815 2200P
R3813 470K
C3814 50V1
H.SYNC
C.SYNC
V.SYNC
IN
G
IC3803 BA7062F
C3805 50V1
C3817 50V1
R3816 1800
L3803 220u
R3814 130K
C3816 100P
R3819 10K
C3821 6800P
R3815 820
C3818 68P
C3819 6P
C3820 6P
R3818 3600
R3817 8200
R3820 10K
L3801 100u
R3830 10K
R3829 10K
R3826 100
R3831 10K
R3827 100
R3828 100
R3832 47K
R3833 47K
TL15
C3824 33P
C3825 15P
X3801 VSX0389
C3827 16V10
C3826 0.01
IC3802 PST7043MT
(RESET)
RST GND VCC
R3834 100
R3835 100
R3836 470
C3822 0.1
C3823 10V33
TL1 TL2 TL3 TL4
TL14 TL13 TL12 TL11 TL10 TL9
IC3801 MN1870824
TL5 TL6 TL7 TL8
P3801
EE Y IN 1
GND 2
Y/C Y IN 3
GND 4
VV Y IN 5
GND 6
N SW5V 7
VITC CLOCK 8
VITC DATA 9
SS DATA 10
TIMER BUS CLK 11
TIMER BUS TLK 12
EE C MUTE 13
TO LUMINANCE & CHROMINANCE SECTION P3004 (Page: 4-17/C-8)
C3807 50V1
TL16
Q3801 2SD601
(AMP)
R3801 100K
R3802 12K
R3804 10K
C3810 0.01
R3807 1K
R3808 330K
D3801 MA165
C3808 16V10
R3803 10K
IC3805 UPC311G2
R3805 15K
R3806 2400
C3809 16V10
R3809 470
R3822 1K
R3821 1K
R3837 4700
R3824 33K
C3828 330P
IC3807 UPC393G2
R3825 10K
R3823 100K
E D C B A
1 2 3 4 5 6 7 8

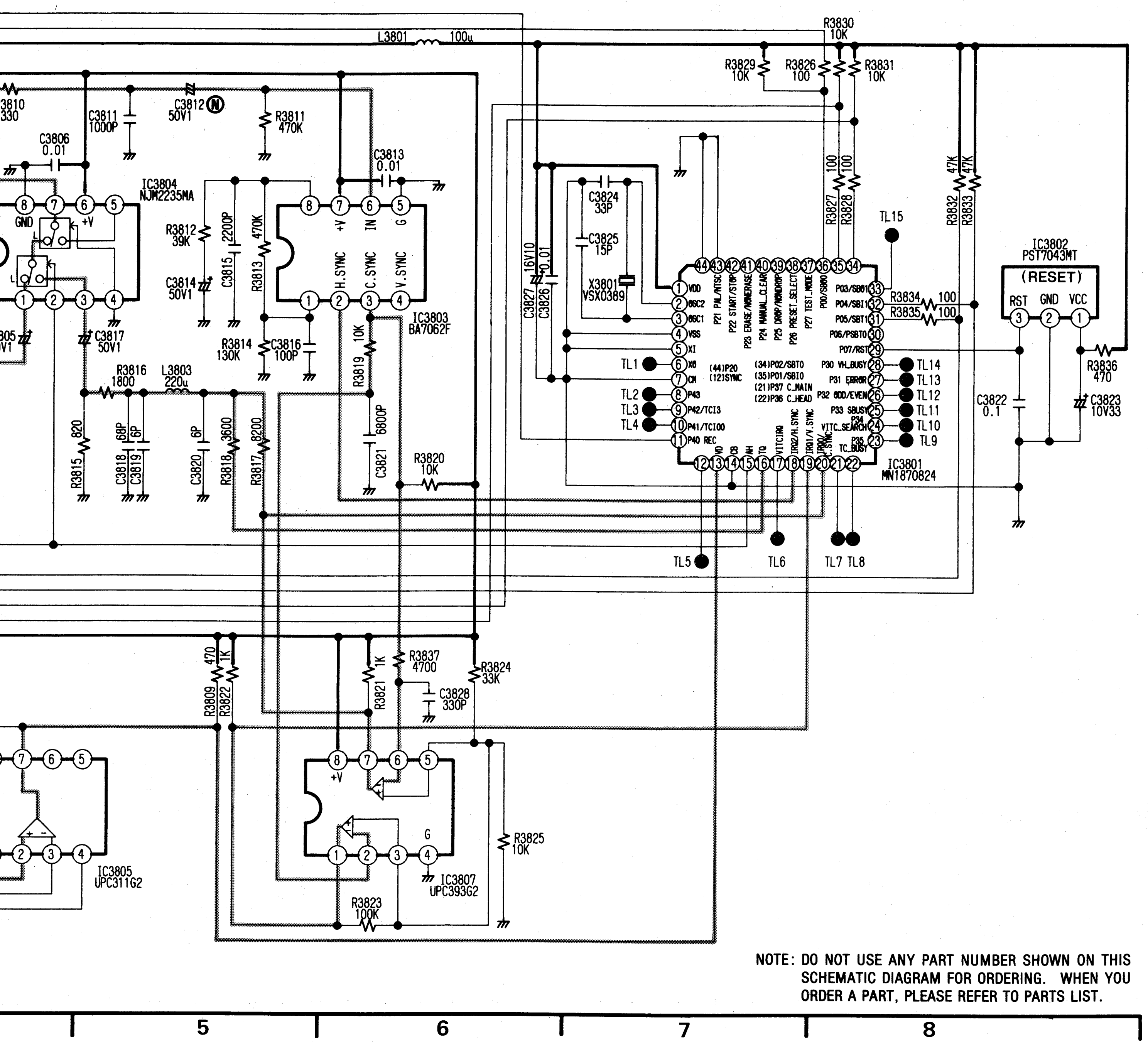
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-20. VITC C.B.


R3826
R3829
K3802
K3801
C3827
C3826
C3824
X3801
C3825
W1
W2
L3801
W3
13
10
D
C
B
A
1

4-20. VITC C.B.A. (VEP03A63A)

MAIN SIGNAL PATH IN REC MODE
MAIN SIGNAL PATH IN PLAYBACK MODE

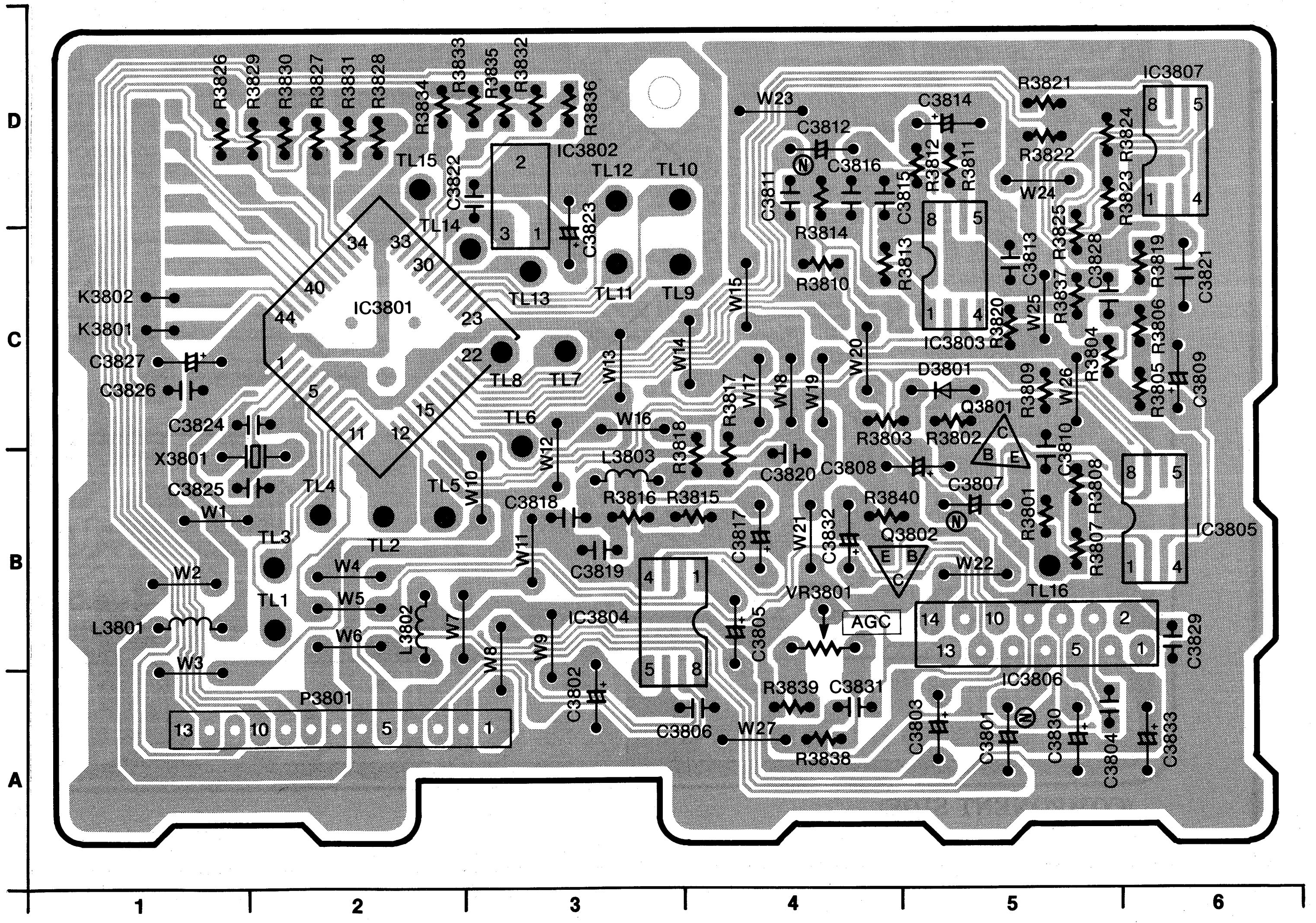


L3801 100u
R3830 10K
R3829 10K
R3826 100
R3831 10K
C3811 1000P
C3812 50V1
R3811 470K
C3806 0.01
C3813 0.01
IC3804 NJM2235MA
R3812 39K
C3815 2200P
R3813 470K
C3814 50V1
H.SYNC
C.SYNC
V.SYNC
IC3803 BA7062F
C3817 50V1
R3814 130K
C3816 100P
R3816 1800
L3803 220u
R3819 10K
C3821 6800P
R3820 10K
R3815 820
C3818 68P
C3819 8P
C3820 6P
R3818 3600
R3817 8200
C3824 33P
C3825 15P
X3801 VSX0389
C3827 16V10
C3826 0.01
R3827 100
R3828 100
R3832 47K
R3833 47K
TL15
R3834 100
R3835 100
IC3802 PST7043MT
(RESET)
RST GND VCC
R3836 470
C3822 0.1
C3823 10V33
IC3801 MN1870824
TL1 TL2 TL3 TL4 TL5 TL6 TL7 TL8 TL9 TL10 TL11 TL12 TL13 TL14
R3809 470
R3822 1K
R3821 1K
R3837 4700
C3828 330P
R3824 33K
R3825 10K
R3823 100K
IC3805 UPC3116Z
IC3807 UPC393G2
5
6
7
8

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

VITC C.B.A.	
Transistor	
Q3801	C-5
Q3802	B-4
Integrated Circuit	
IC3801	C-2
IC3802	D-3
IC3803	C-5
IC3804	B-3
IC3805	B-6
IC3806	B-5
IC3807	D-6
Adjustment	
VR3801	B-4
Connector	
P3801	A-2

ADDRESS INFORMATION

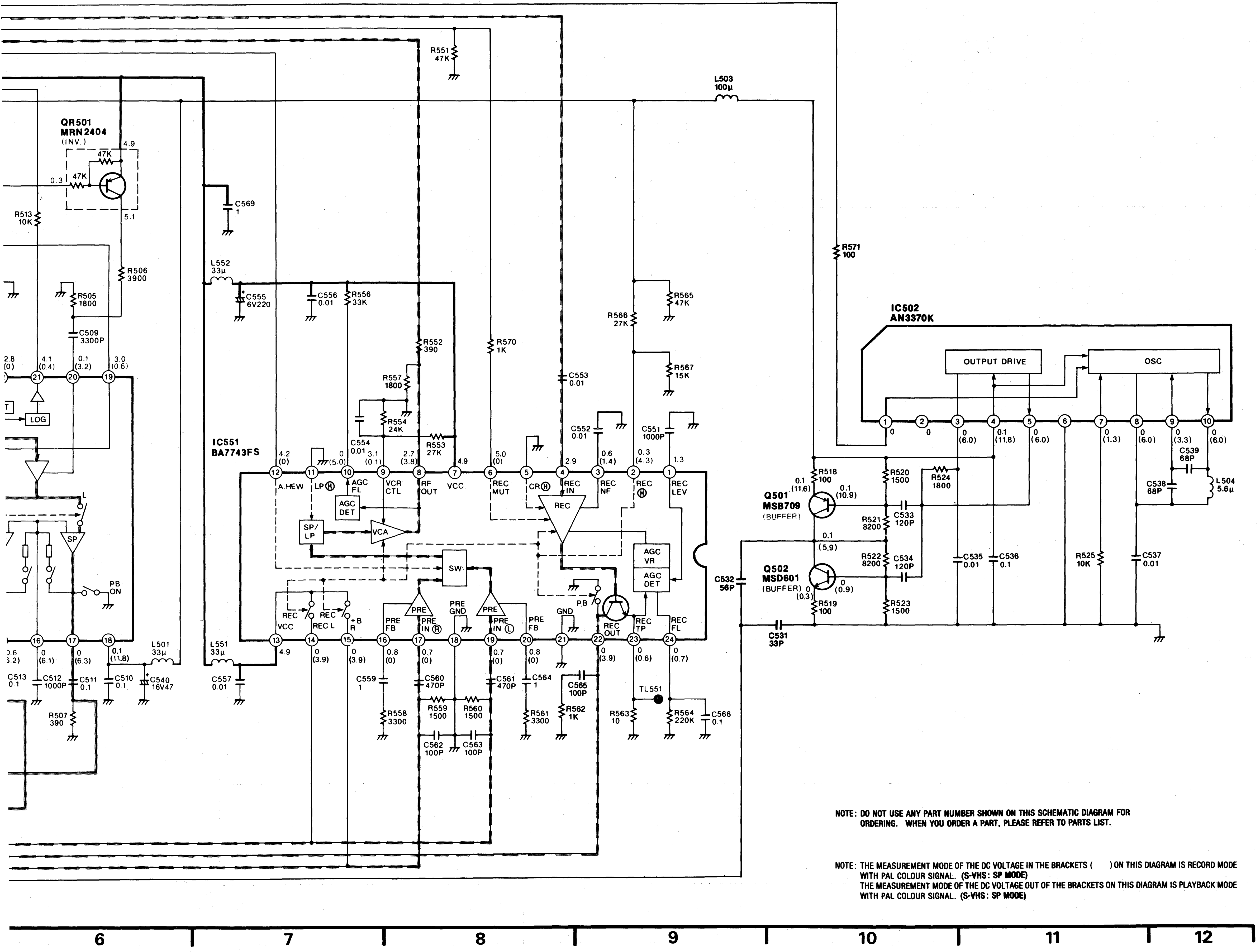


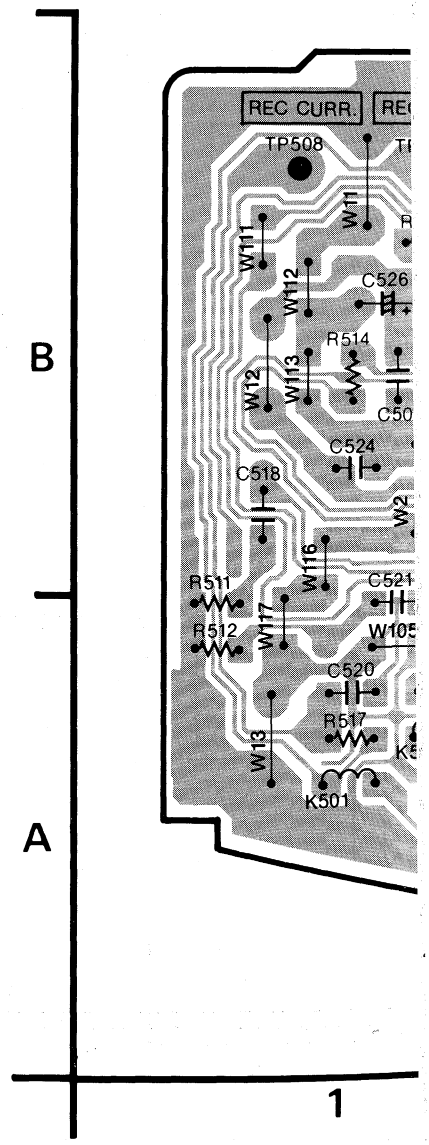
D
C
B
A
1
2
3
4
5
6
IC3801
IC3802
IC3803
IC3804
IC3805
IC3806
IC3807
Q3801
Q3802
VR3801
AGC
P3801
X3801
L3801
L3802
L3803
K3802
K3801
D3801

4-22. HEAD AMP C.

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

Hi-Fi AUDIO MAIN SIGNAL PATH IN REC MODE
Hi-Fi AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE


QR501
MRN2404
(INV.)
47K
47K
R513 10K
R506 3900
R505 1800
C509 3300P
LOG
SP
PB ON
C513 0.1
C512 1000P
C511 0.1
C510 0.1
C540 16V47
R507 390
L501 33µ
R551 47K
C569 1
L552 33µ
C555 6V220
C556 0.01
R556 33K
R552 390
R557 1800
R554 24K
R553 27K
C554 0.01
R570 1K
C553 0.01
C552 0.01
L503 100µ
R565 47K
R566 27K
R567 15K
C551 1000P
IC551
BA7743FS
A.HEW
LP Ⓗ
AGC FL
AGC DET
VCR CTL
RF OUT
VCC
REC MUT
CR Ⓗ
REC IN
REC NF
REC Ⓗ
REC LEV
REC
SP/LP
VCA
SW
AGC VR
AGC DET
PRE
PRE GND
PRE
REC VCC
REC L
+B R
PRE FB
PRE IN Ⓡ
PRE IN Ⓛ
PRE FB
GND
PB
REC OUT
REC TP
REC FL
L551 33µ
C557 0.01
C559 1
C560 470P
R558 3300
R559 1500
R560 1500
C562 100P
C563 100P
C561 470P
C564 1
R561 3300
C565 100P
R562 1K
R563 10
TL551
R564 220K
C566 0.1
R571 100
IC502
AN3370K
OUTPUT DRIVE
OSC
Q501
MSB709
(BUFFER)
R518 100
R520 1500
R524 1800
C533 120P
R521 8200
Q502
MSD601
(BUFFER)
C532 56P
R522 8200
C534 120P
R519 100
R523 1500
C531 33P
C535 0.01
C536 0.1
R525 10K
C537 0.01
C539 68P
C538 68P
L504 5.6µ
6
7
8
9
10
11
12


REC CURR.
TP508
W11
W111
W112
W113
W12
C526
R514
C524
C518
W2
W116
R511
R512
W117
C521
W105
C520
R517
W13
K501
B
A
1

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS ( ) ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)
THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL. (S-VHS: SP MODE)

MODE

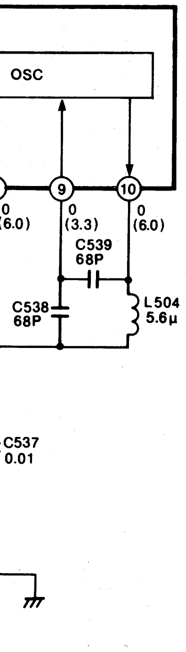

OSC
9
10
0
(6.0)
0
(3.3)
0
(6.0)
C539
68P
C538
68P
L504
5.6μ
C537
0.01

DIAGRAM IS RECORD MODE

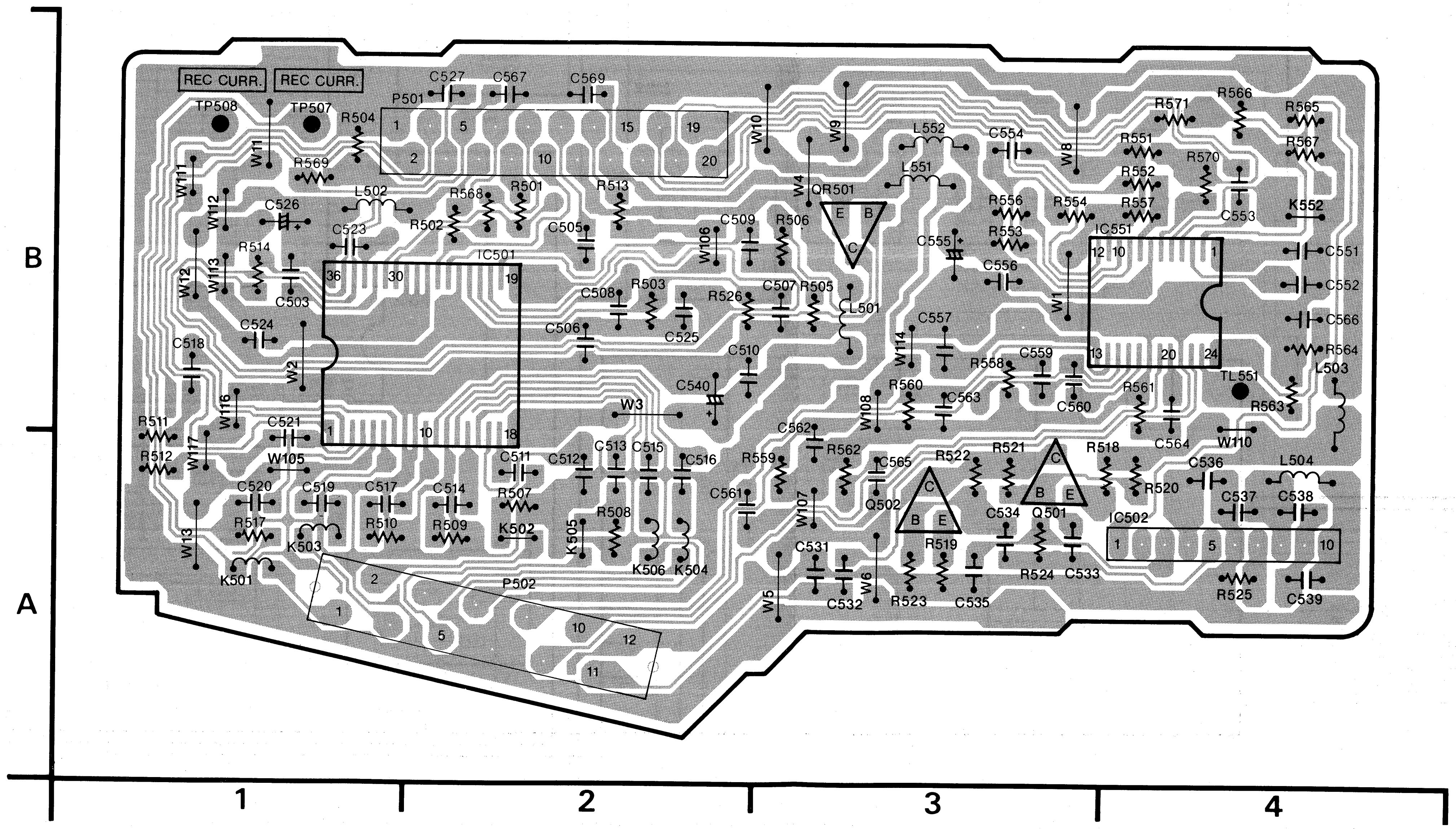
AGRAM IS PLAYBACK MODE

12

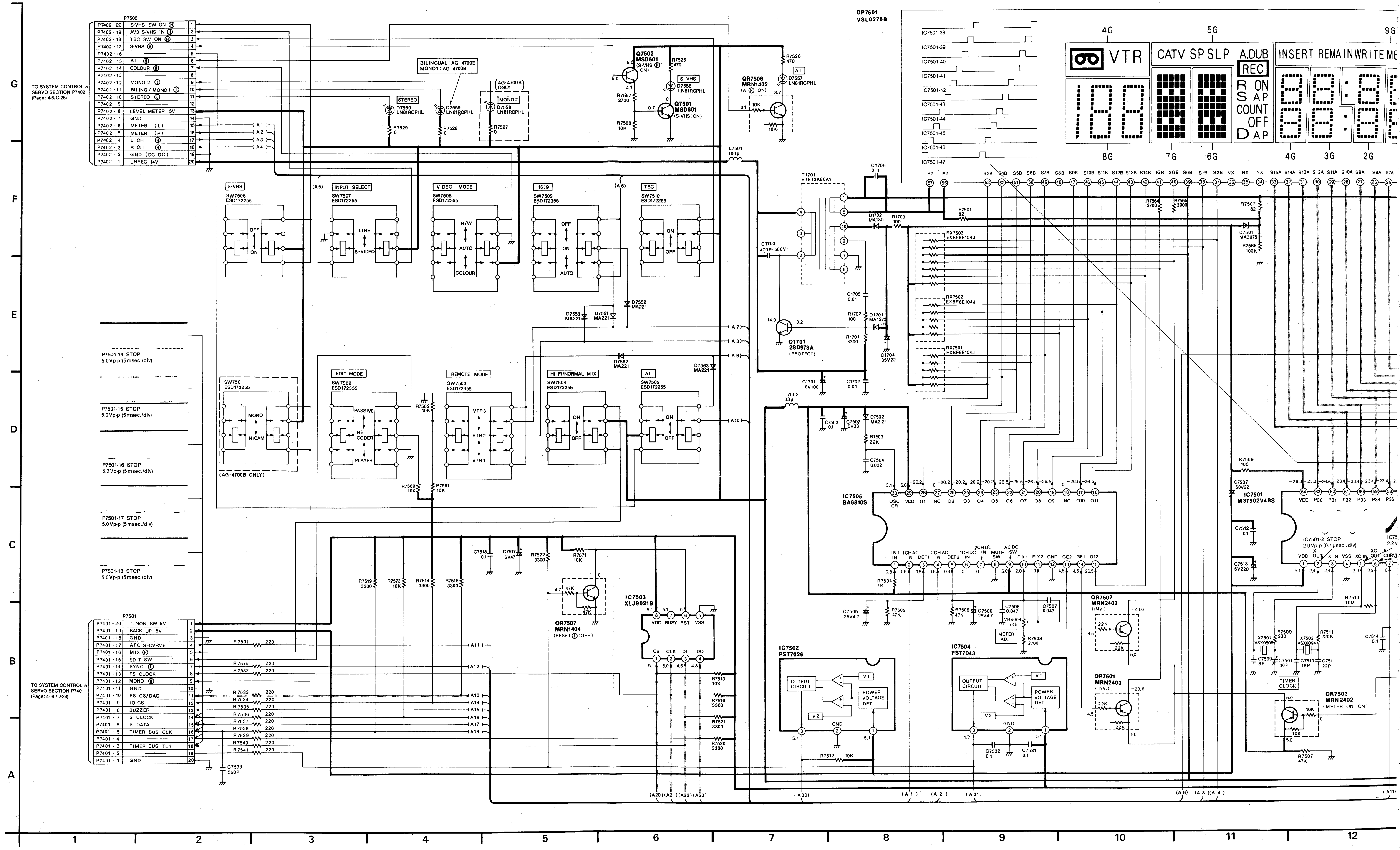
4-22. HEAD AMP C.B.A. (VEP05176G)

HEAD AMP C.B.A.	
Transistor	
Q501	A-3
Q502	A-3
Transistor & Resistor	
QR501	B-3
Integrated Circuit	
IC501	B-1
IC502	A-4
IC551	B-4
Test Point	
TL551	B-4
TP507	B-1
TP508	B-1
Connector	
P501	B-2
P502	A-1

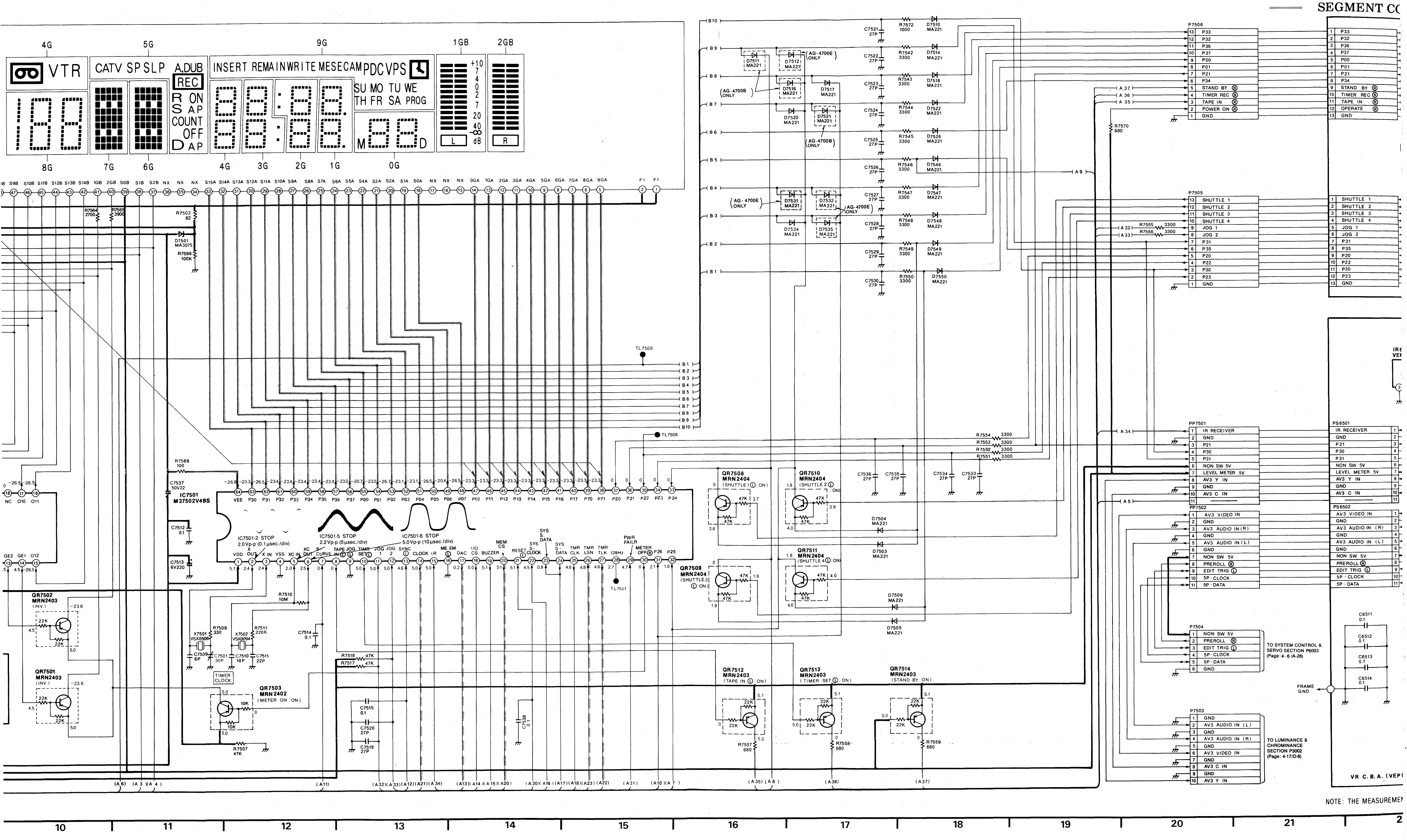
ADDRESS INFORMATION


REC CURR.
REC CURR.
TP508
TP507
R504
P501
C527
C567
C569
1
2
5
10
15
19
20
W10
W9
W11
W111
R569
L502
R568
R501
R513
W4
QR501
E
B
C
L552
C554
L551
W8
R571
R566
R565
R551
R567
R570
R552
R556
R554
R557
C553
K552
C526
R502
C505
C509
R506
W106
C555
R553
IC551
C551
W12
R514
C523
IC501
36
30
19
C556
12
10
1
C552
W113
C503
C508
R503
R526
C507
R505
L501
W1
C566
C524
C506
C525
C557
W114
C518
C510
R558
C559
13
20
24
R564
W2
C540
R560
C563
C560
R561
TL551
L503
W116
W3
W108
R563
R511
C521
1
10
18
C562
R521
R518
C564
W110
R512
W117
W105
C511
C513
C515
C512
C516
R559
R562
C565
R522
C
C536
L504
C520
C519
C517
C514
R507
C561
Q502
B
E
Q501
R520
C537
C538
R517
R510
R509
K502
K505
R508
W107
C534
IC502
W13
K503
K506
K504
C531
R519
5
K501
P502
W6
R524
C533
W5
C532
R523
C535
R525
C539
1
2
5
10
11
12
B
A
1
2
3
4

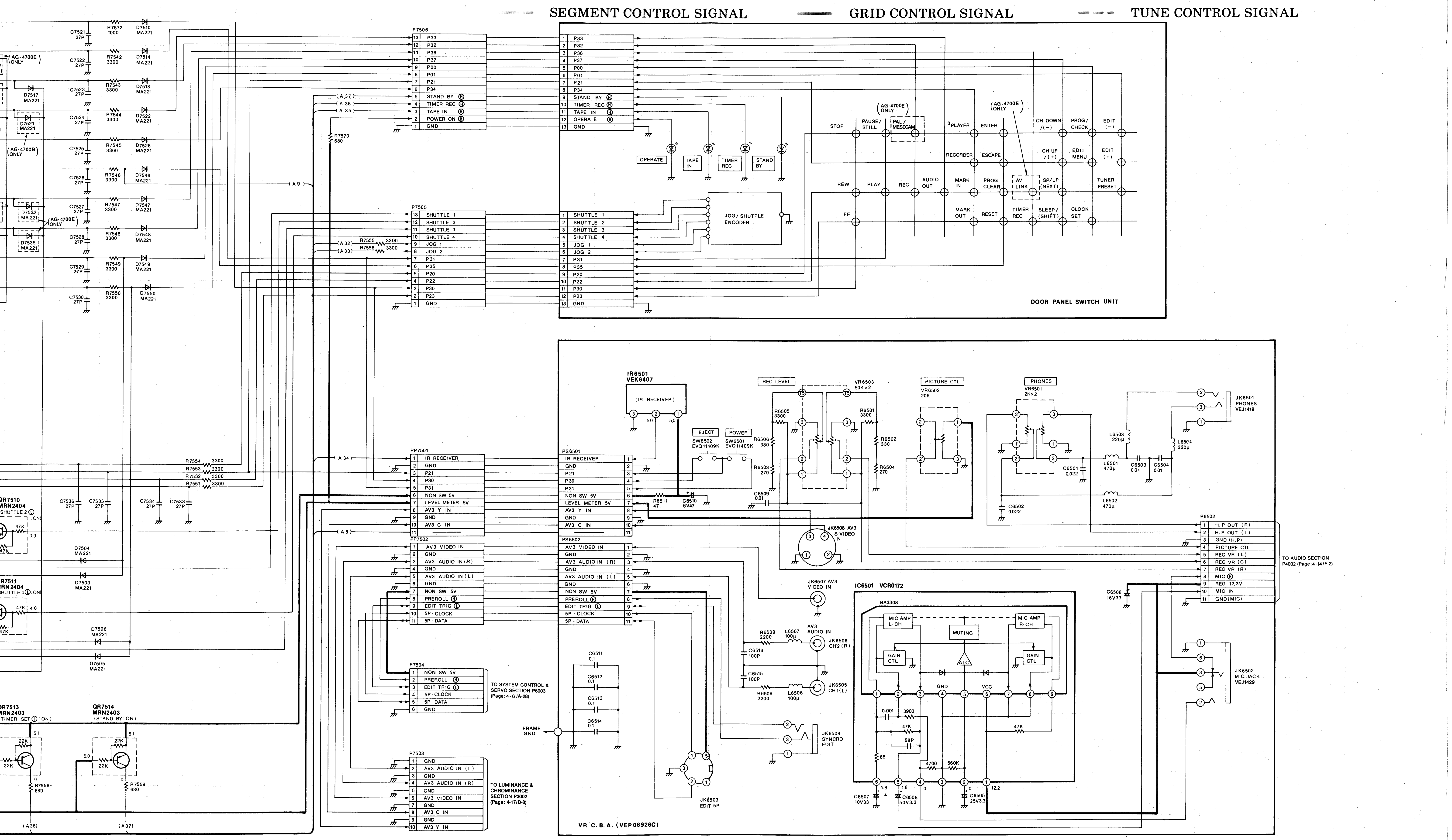
4-23. TIMER & VR SCHEMATIC DIAGRAM


P7502
P7402 - 20 S-VHS SW ON Ⓗ
P7402 - 19 AV3 S-VHS IN Ⓗ
P7402 - 18 TBC SW ON Ⓗ
P7402 - 17 S-VHS Ⓗ
P7402 - 16
P7402 - 15 AI Ⓗ
P7402 - 14 COLOUR Ⓗ
P7402 - 13
P7402 - 12 MONO 2 Ⓛ
P7402 - 11 BILING / MONO1 Ⓛ
P7402 - 10 STEREO Ⓛ
P7402 - 9
P7402 - 8 LEVEL METER 5V
P7402 - 7 GND
P7402 - 6 METER (L)
P7402 - 5 METER (R)
P7402 - 4 L CH Ⓗ
P7402 - 3 R CH Ⓗ
P7402 - 2 GND (DC DC)
P7402 - 1 UNREG 14V
TO SYSTEM CONTROL & SERVO SECTION P7402 (Page: 4-6/C-28)
BILINGUAL : AG-4700E
MONO1 : AG-4700B
(AG-4700B) ONLY
STEREO
MONO 2
D7560 LN81RCPHL
D7559 LN81RCPHL
D7558 LN81RCPHL
R7529 0
R7528 0
R7527 0
Q7502 MSD601 (S-VHS Ⓗ : ON)
Q7501 MSD601 (S-VHS : ON)
R7525 470
S-VHS
D7556 LN81RCPHL
R7567 2700
R7568 10K
R7526 470
AI
D7557 LN81RCPHL
QR7506 MRN1402 (AI Ⓗ : ON)
L7501 100μ
S-VHS SW7506 ESD172255
INPUT SELECT SW7507 ESD172255
LINE
S-VIDEO
VIDEO MODE SW7508 ESD172355
B/W
AUTO
COLOUR
16:9 SW7509 ESD172355
OFF
ON
AUTO
TBC SW7510 ESD172255
D7552 MA221
D7553 MA221
D7551 MA221
D7562 MA221
D7563 MA221
SW7501 ESD172255
MONO
NICAM
(AG-4700B ONLY)
EDIT MODE SW7502 ESD172355
PASSIVE
RE CODER
PLAYER
REMOTE MODE SW7503 ESD172355
VTR3
VTR2
VTR1
HI-FI/NORMAL MIX SW7504 ESD172255
AI SW7505 ESD172255
R7562 10K
R7560 10K
R7561 10K
P7501-14 STOP 5.0Vp-p (5msec./div)
P7501-15 STOP 5.0Vp-p (5msec./div)
P7501-16 STOP 5.0Vp-p (5msec./div)
P7501-17 STOP 5.0Vp-p (5msec./div)
P7501-18 STOP 5.0Vp-p (5msec./div)
P7501
P7401 - 20 T. NON. SW 5V
P7401 - 19 BACK UP 5V
P7401 - 18 GND
P7401 - 17 AFC S-CVRVE
P7401 - 16 MIX Ⓗ
P7401 - 15 EDIT SW
P7401 - 14 SYNC Ⓛ
P7401 - 13 FS CLOCK
P7401 - 12 MONO Ⓗ
P7401 - 11 GND
P7401 - 10 FS CS/DAC
P7401 - 9 IO CS
P7401 - 8 BUZZER
P7401 - 7 S. CLOCK
P7401 - 6 S. DATA
P7401 - 5 TIMER BUS CLK
P7401 - 4
P7401 - 3 TIMER BUS TLK
P7401 - 2
P7401 - 1 GND
TO SYSTEM CONTROL & SERVO SECTION P7401 (Page: 4-6 /D-28)
R7531 220
R7574 220
R7532 220
R7533 220
R7534 220
R7535 220
R7536 220
R7537 220
R7538 220
R7539 220
R7540 220
R7541 220
C7539 560P
R7519 3300
R7573 10K
R7514 3300
R7515 3300
C7518 0.1
C7517 6V47
R7522 3300
R7571 10K
QR7507 MRN1404 (RESET Ⓛ : OFF)
IC7503 XLJ9021B
VDD BUSY RST VSS
CS CLK DI DO
R7513 10K
R7516 3300
R7521 3300
R7520 3300
(A20) (A21) (A22) (A23)
T1701 ETE13K80AY
C1706 0.1
C1703 470P(500V)
D1702 MA185
R1703 100
C1705 0.01
R1702 100
D1701 MA1270
R1701 3300
Q1701 2SD973A (PROTECT)
C1704 35V22
C1701 16V100
C1702 0.01
L7502 33μ
C7503 0.1
C7502 6V33
D7502 MA221
R7503 22K
C7504 0.022
IC7505 BA6810S
OSC CR VDD O1 NC O2 O3 O4 O5 O6 O7 O8 O9 NC O10 O11
INJ IN 1CH AC IN 2CH AC DET1 IN DET2 1CH DC IN 2CH DC IN AC DC MUTE SW FIX1 FIX2 GND GE2 GE1 O12
R7504 1K
C7505 25V4.7
R7505 47K
R7506 47K
C7506 25V4.7
C7508 0.047
VR4004 5KB METER ADJ
R7508 2700
C7507 0.047
IC7502 PST7026
IC7504 PST7043
OUTPUT CIRCUIT
POWER VOLTAGE DET
V1
V2
GND
R7512 10K
C7532 0.1
C7531 0.1
QR7502 MRN2403 (INV.)
QR7501 MRN2403 (INV.)
(A30) (A1) (A2) (A31) (A6) (A3) (A4) (A11)
DP7501 VSL0276B
IC7501-38
IC7501-39
IC7501-40
IC7501-41
IC7501-42
IC7501-43
IC7501-44
IC7501-45
IC7501-46
IC7501-47
4G 5G 9G
VTR
CATV SP SLP
A.DUB
REC
INSERT REMAIN WRITE ME
R ON
S AP
COUNT
OFF
D AP
8G 7G 6G 4G 3G 2G
F2 F2 S3B S4B S5B S6B S7B S8B S9B S10B S11B S12B S13B S14B 1GB 2GB S0B S1B S2B NX NX NX S15A S14A S13A S12A S11A S10A S9A S8A S7A
R7501 82
R7564 2700
R7565 3900
R7502 82
D7501 MA3075
R7566 100K
RX7503 EXBF6E104J
RX7502 EXBF6E104J
RX7501 EXBF6E104J
R7569 100
C7537 50V22
IC7501 M37502V4BS
VEE P30 P31 P32 P33 P34 P35
C7512 0.1
C7513 6V220
IC7501-2 STOP 2.0Vp-p (0.1μsec./div)
VDD OUT X IN VSS XC IN XC OUT
R7510 10M
X7501 VSX0506
R7509 330
X7502 VSX0094
R7511 220K
C7509 6P
C7501 30P
C7510 18P
C7511 22P
C7514 0.1
TIMER CLOCK
QR7503 MRN2402 (METER ON : ON)
R7507 47K
G F E D C B A
1 2 3 4 5 6 7 8 9 10 11 12

SEGMENT CO


4G
5G
9G
1GB
2GB
VTR
CATV SP SLP A.DUB
REC
INSERT REMAIN WRITE MESECAM PDC VPS
R ON
S AP
COUNT
OFF
D AP
SU MO TU WE
TH FR SA PROG
+10 7 4 0 2 7 20 40 -∞ dB
L
R
8G
7G
6G
4G
3G
2G
1G
0G
F1 F1
IC7501
M37502V4BS
IC7501-2 STOP 2.0Vp-p (0.1μsec./div)
IC7501-5 STOP 2.2Vp-p (5μsec./div)
IC7501-6 STOP 5.0Vp-p (10μsec./div)
VDD OUT X IN VSS XC IN XC OUT CURVE TAPE IN JOG TIMR SET JOG 1 JOG 2 SYNC CLOCK IR ME.EM DAC I/O CS BUZZER MEM CS RESET SYS S.CLOCK SYS S.DATA SYS S.DATA TMR CLK TMR LSN TMR TLK 128Hz PWR FAILR METER OFF P26 P25
VEE P30 P31 P32 P33 P34 P35 P36 P37 P00 P01 P02 P03 P04 P05 P06 P07 P10 P11 P12 P13 P14 P15 P16 P17 P70 P71 P20 P21 P22 P23 P24
NC O10 O11
GE2 GE1 O12
QR7502 MRN2403 (INV.)
QR7501 MRN2403 (INV.)
QR7503 MRN2402 (METER ON : ON)
TIMER CLOCK
X7501 VSX0506
X7502 VSX0094
R7502 82
D7501 MA3075
R7566 100K
R7564 2700
R7565 3900
R7569 100
C7537 50V22
C7512 0.1
C7513 6V220
R7510 10M
R7509 330
R7511 220K
C7509 6P
C7501 30P
C7510 18P
C7511 22P
C7514 0.1
R7518 47K
R7517 47K
C7515 0.1
C7520 27P
C7519 27P
C7518 0.1
R7507 47K
TL7509
TL7508
TL7501
QR7508 MRN2404 (SHUTTLE 1 Ⓛ : ON)
QR7510 MRN2404 (SHUTTLE 2 Ⓛ : ON)
QR7509 MRN2404 (SHUTTLE 3 Ⓛ : ON)
QR7511 MRN2404 (SHUTTLE 4 Ⓛ : ON)
QR7512 MRN2403 (TAPE IN Ⓛ : ON)
QR7513 MRN2403 (TIMER SET Ⓛ : ON)
QR7514 MRN2403 (STAND BY : ON)
R7557 680
R7558 680
R7559 680
D7504 MA221
D7503 MA221
D7506 MA221
D7505 MA221
C7536 27P
C7535 27P
C7534 27P
C7533 27P
R7554 3300
R7553 3300
R7552 3300
R7551 3300
B1 B2 B3 B4 B5 B6 B7 B8 B9 B10
C7521 27P R7572 1000 D7510 MA221
C7522 27P R7542 3300 D7514 MA221
C7523 27P R7543 3300 D7518 MA221
C7524 27P R7544 3300 D7522 MA221
C7525 27P R7545 3300 D7526 MA221
C7526 27P R7546 3300 D7546 MA221
C7527 27P R7547 3300 D7547 MA221
C7528 27P R7548 3300 D7548 MA221
C7529 27P R7549 3300 D7549 MA221
C7530 27P R7550 3300 D7550 MA221
D7511 MA221
D7512 MA221
D7516 MA221
D7517 MA221
D7520 MA221
D7521 MA221
D7531 MA221
D7532 MA221
D7534 MA221
D7535 MA221
(AG-4700E) ONLY
(AG-4700B) ONLY
R7570 680
R7555 3300
R7556 3300
P7506
13 P33
12 P32
11 P36
10 P37
9 P00
8 P01
7 P21
6 P34
5 STAND BY Ⓗ
4 TIMER REC Ⓗ
3 TAPE IN Ⓗ
2 POWER ON Ⓗ
1 GND
1 P33
2 P32
3 P36
4 P37
5 P00
6 P01
7 P21
8 P34
9 STAND BY Ⓗ
10 TIMER REC Ⓗ
11 TAPE IN Ⓗ
12 OPERATE Ⓗ
13 GND
P7505
13 SHUTTLE 1
12 SHUTTLE 2
11 SHUTTLE 3
10 SHUTTLE 4
9 JOG 1
8 JOG 2
7 P31
6 P35
5 P20
4 P22
3 P30
2 P23
1 GND
1 SHUTTLE 1
2 SHUTTLE 2
3 SHUTTLE 3
4 SHUTTLE 4
5 JOG 1
6 JOG 2
7 P31
8 P35
9 P20
10 P22
11 P30
12 P23
13 GND
PP7501
1 IR RECEIVER
2 GND
3 P21
4 P30
5 P31
6 NON SW 5V
7 LEVEL METER 5V
8 AV3 Y IN
9 GND
10 AV3 C IN
11
PP7502
1 AV3 VIDEO IN
2 GND
3 AV3 AUDIO IN (R)
4 GND
5 AV3 AUDIO IN (L)
6 GND
7 NON SW 5V
8 PREROLL Ⓗ
9 EDIT TRIG Ⓛ
10 5P · CLOCK
11 5P · DATA
PS6501
IR RECEIVER 1
GND 2
P21 3
P30 4
P31 5
NON SW 5V 6
LEVEL METER 5V 7
AV3 Y IN 8
GND 9
AV3 C IN 10
11
PS6502
AV3 VIDEO IN 1
GND 2
AV3 AUDIO IN (R) 3
GND 4
AV3 AUDIO IN (L) 5
GND 6
NON SW 5V 7
PREROLL Ⓗ 8
EDIT TRIG Ⓛ 9
5P · CLOCK 10
5P · DATA 11
P7504
1 NON SW 5V
2 PREROLL Ⓗ
3 EDIT TRIG Ⓛ
4 5P · CLOCK
5 5P · DATA
6 GND
TO SYSTEM CONTROL & SERVO SECTION P6003 (Page: 4-6 /A-28)
P7503
1 GND
2 AV3 AUDIO IN (L)
3 GND
4 AV3 AUDIO IN (R)
5 GND
6 AV3 VIDEO IN
7 GND
8 AV3 C IN
9 GND
10 AV3 Y IN
TO LUMINANCE & CHROMINANCE SECTION P3002 (Page: 4-17/D-8)
C6511 0.1
C6512 0.1
C6513 0.1
C6514 0.1
FRAME GND
VR C.B.A. (VEP
IR VE
(A6) (A3)(A4) (A11) (A32)(A33)(A12)(A21)(A34) (A13)(A14)(A15)(A20) (A30)(A16)(A17)(A18)(A23)(A22) (A31) (A10)(A7) (A35)(A8) (A36) (A37)
10 11 12 13 14 15 16 17 18 19 20 21 2

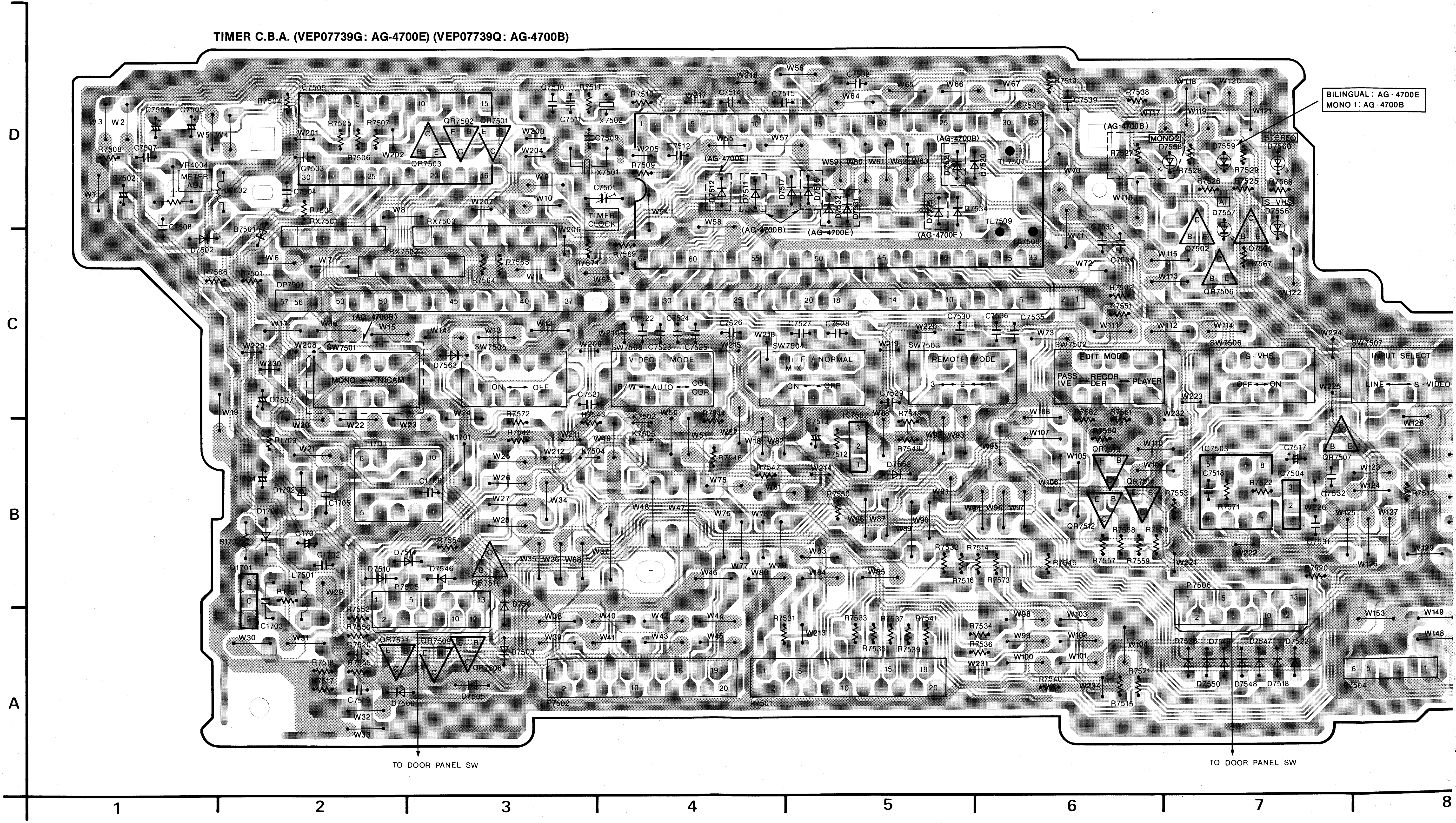
NOTE: THE MEASUREMEN

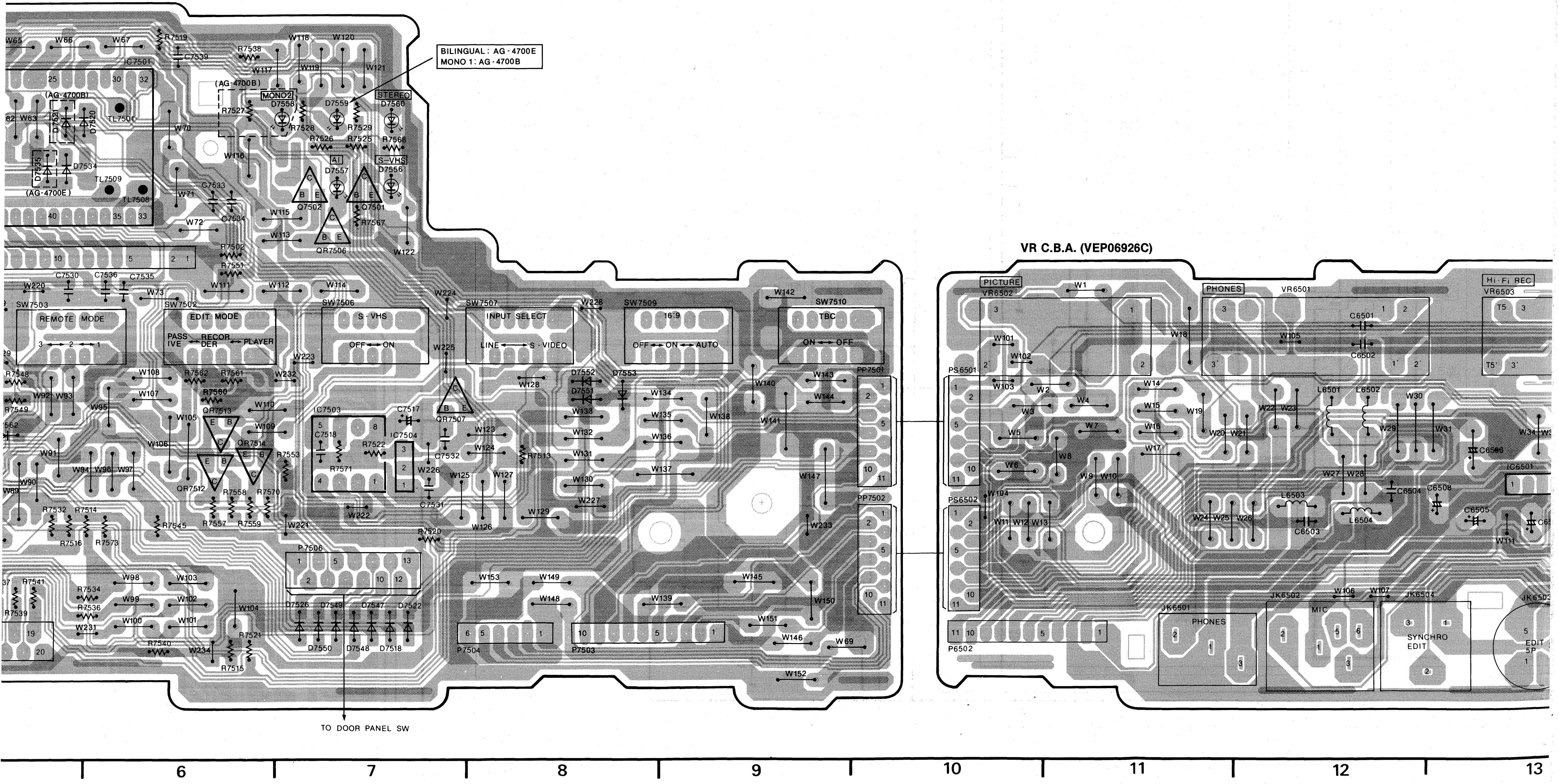

SEGMENT CONTROL SIGNAL
GRID CONTROL SIGNAL
TUNE CONTROL SIGNAL
P7506
P33
P32
P36
P37
P00
P01
P21
P34
STAND BY Ⓗ
TIMER REC Ⓗ
TAPE IN Ⓗ
POWER ON Ⓗ
OPERATE Ⓗ
GND
P7505
SHUTTLE 1
SHUTTLE 2
SHUTTLE 3
SHUTTLE 4
JOG 1
JOG 2
P31
P35
P20
P22
P30
P23
JOG/SHUTTLE ENCODER
OPERATE
TAPE IN
TIMER REC
STAND BY
(AG-4700E ONLY)
STOP
PAUSE/STILL
PAL/MESECAM
3PLAYER
ENTER
CH DOWN /(−)
PROG/CHECK
EDIT (−)
RECORDER
ESCAPE
CH UP /(+)
EDIT MENU
EDIT (+)
REW
PLAY
REC
AUDIO OUT
MARK IN
PROG. CLEAR
AV LINK
SP/LP (NEXT)
TUNER PRESET
FF
MARK OUT
RESET
TIMER REC
SLEEP/(SHIFT)
CLOCK SET
DOOR PANEL SWITCH UNIT
R7572 1000
D7510 MA221
C7521 27P
R7542 3300
D7514 MA221
C7522 27P
(AG-4700E) ONLY
D7517 MA221
R7543 3300
D7518 MA221
C7523 27P
C7524 27P
R7544 3300
D7522 MA221
D7521 MA221
(AG-4700B) ONLY
C7525 27P
R7545 3300
D7526 MA221
C7526 27P
R7546 3300
D7546 MA221
C7527 27P
R7547 3300
D7547 MA221
D7532 MA221
D7535 MA221
C7528 27P
R7548 3300
D7548 MA221
C7529 27P
R7549 3300
D7549 MA221
C7530 27P
R7550 3300
D7550 MA221
R7570 680
(A 37)
(A 36)
(A 35)
(A 9)
(A 32)
(A 33)
R7555 3300
R7556 3300
(A 34)
(A 5)
R7554 3300
R7553 3300
R7552 3300
R7551 3300
QR7510 MRN2404 SHUTTLE 2 Ⓛ : ON
QR7511 MRN2404 SHUTTLE 4 Ⓛ : ON
C7536 27P
C7535 27P
C7534 27P
C7533 27P
D7504 MA221
D7503 MA221
D7506 MA221
D7505 MA221
QR7513 MRN2403 TIMER SET Ⓛ : ON
QR7514 MRN2403 (STAND BY : ON)
R7558 680
R7559 680
(A36)
(A37)
PP7501
IR RECEIVER
GND
P21
P30
P31
NON SW 5V
LEVEL METER 5V
AV3 Y IN
AV3 C IN
PP7502
AV3 VIDEO IN
AV3 AUDIO IN (R)
AV3 AUDIO IN (L)
PREROLL Ⓗ
EDIT TRIG Ⓛ
5P · CLOCK
5P · DATA
P7504
TO SYSTEM CONTROL & SERVO SECTION P6003 (Page: 4-6 /A-28)
P7503
TO LUMINANCE & CHROMINANCE SECTION P3002 (Page: 4-17/D-8)
PS6501
PS6502
IR6501 VEK6407
(IR RECEIVER)
EJECT
POWER
SW6502 EVQ11409K
SW6501 EVQ11409K
R6511 47
C6510 6V47
C6509 0.01
REC LEVEL
VR6503 50K×2
R6505 3300
R6506 330
R6503 270
R6501 3300
R6502 330
R6504 270
PICTURE CTL
VR6502 20K
PHONES
VR6501 2K×2
L6503 220µ
L6504 220µ
L6501 470µ
C6503 0.01
C6504 0.01
C6501 0.022
C6502 0.022
L6502 470µ
JK6501 PHONES VEJ1419
JK6508 AV3 S-VIDEO IN
JK6507 AV3 VIDEO IN
P6502
H.P OUT (R)
H.P OUT (L)
GND (H.P)
PICTURE CTL
REC VR (L)
REC VR (C)
REC VR (R)
MIC Ⓗ
REG 12.3V
MIC IN
GND(MIC)
TO AUDIO SECTION P4002 (Page: 4-14 /F-2)
C6508 16V33
R6509 2200
L6507 100µ
AV3 AUDIO IN
JK6506 CH2 (R)
C6516 100P
C6515 100P
R6508 2200
L6506 100µ
JK6505 CH1 (L)
IC6501 VCR0172
BA3308
MIC AMP L·CH
MIC AMP R·CH
MUTING
GAIN CTL
ALC
GND
VCC
JK6502 MIC JACK VEJ1429
C6511 0.1
C6512 0.1
C6513 0.1
C6514 0.1
FRAME GND
JK6504 SYNCRO EDIT
JK6503 EDIT 5P
C6507 10V33
C6506 50V3.3
C6505 25V3.3
VR C. B. A. (VEP06926C)
17
18
19
20
21
22
23
24
25
26
27
28

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE. (S-VHS: SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-24. TIMER C.B.A. (VEP07739G: AG-4700E) (VEP07739Q: AG-4700B) & VR C.B.A. (VEP06926C)

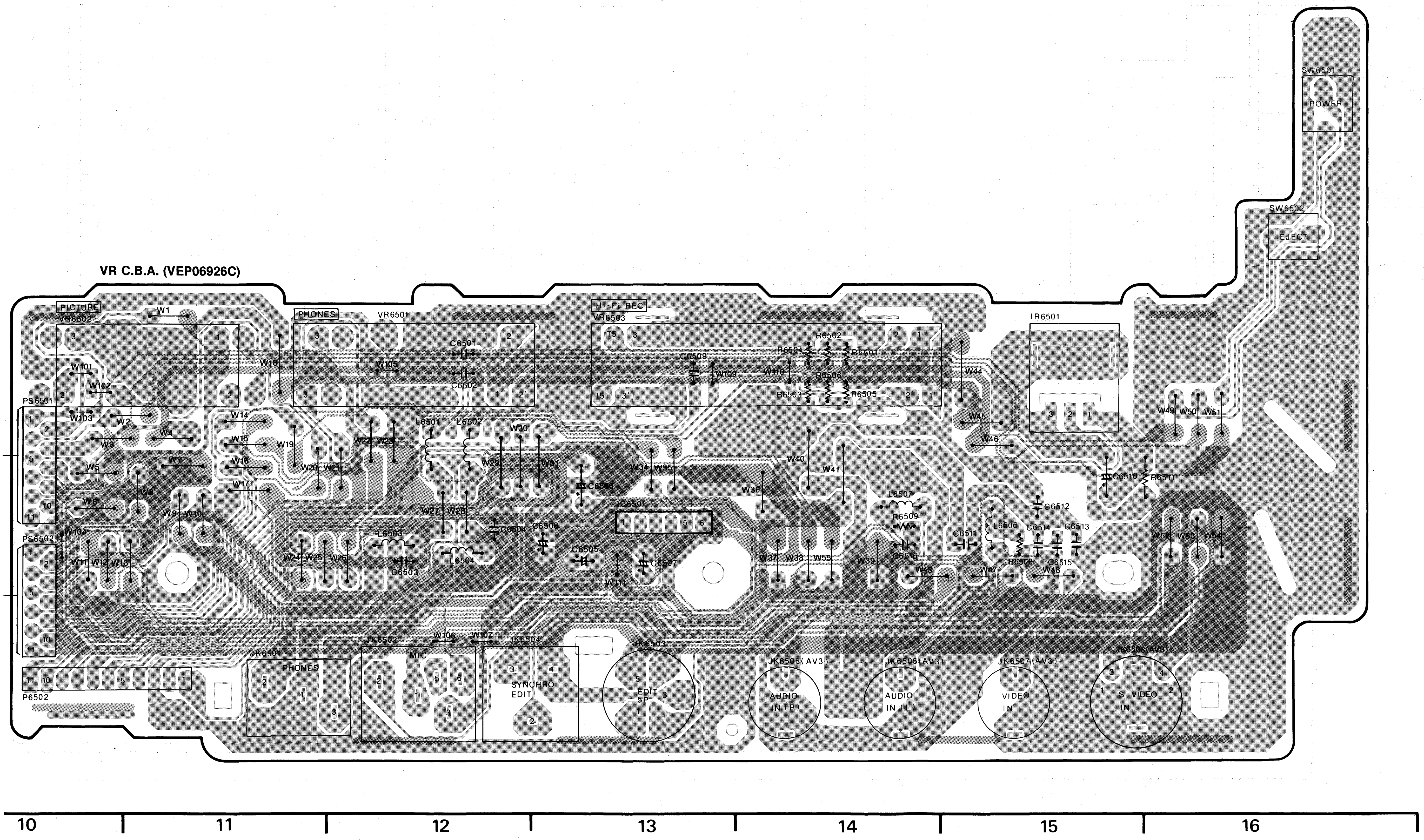

TIMER C.B.A. (VEP07739G: AG-4700E) (VEP07739Q: AG-4700B)
BILINGUAL : AG - 4700E
MONO 1 : AG - 4700B
MONO ↔ NICAM
AI ON ↔ OFF
VIDEO MODE B/W ↔ AUTO ↔ COLOUR
Hi - Fi / NORMAL MIX ON ↔ OFF
REMOTE MODE 3 ↔ 2 ↔ 1
EDIT MODE PASSIVE ↔ RECORDER ↔ PLAYER
S - VHS OFF ↔ ON
INPUT SELECT LINE ↔ S - VIDEO
TIMER CLOCK
METER ADJ
STEREO
MONO2
S-VHS
AI
TO DOOR PANEL SW
TO DOOR PANEL SW
D
C
B
A
1
2
3
4
5
6
7
8



BILINGUAL : AG-4700E
MONO 1 : AG-4700B

VR C.B.A. (VEP06926C)
IC7501
(AG-4700B)
(AG-4700E)
TL7501
TL7508
TL7509
D7520
D7521
D7534
D7535
MONO2
STEREO
AI
S-VHS
D7556
D7557
D7558
D7559
D7560
Q7501
Q7502
QR7506
R7519
C7539
R7538
R7527
R7528
R7529
R7526
R7525
R7568
R7567
C7533
C7534
R7502
R7551
C7530
C7536
C7535
SW7503
REMOTE MODE
3 ← 2 → 1
SW7502
EDIT MODE
PASSIVE ← RECORDER → PLAYER
SW7506
S-VHS
OFF ↔ ON
SW7507
INPUT SELECT
LINE ↔ S-VIDEO
SW7509
16:9
OFF ↔ ON ↔ AUTO
SW7510
TBC
ON ↔ OFF
IC7503
IC7504
C7517
C7518
C7531
C7532
R7522
R7571
R7513
QR7507
QR7512
QR7513
QR7514
R7553
R7557
R7558
R7559
R7570
R7545
R7548
R7549
R7560
R7561
R7562
R7532
R7514
R7516
R7573
R7520
R7534
R7536
R7539
R7540
R7541
R7521
R7515
P7506
D7526
D7549
D7547
D7522
D7550
D7548
D7518
D7551
D7552
D7553
P7504
P7503
PP7501
PP7502
TO DOOR PANEL SW
PICTURE
VR6502
PHONES
VR6501
Hi-Fi REC
VR6503
C6501
C6502
PS6501
PS6502
L6501
L6502
L6503
L6504
C6503
C6504
C6505
C6506
C6508
IC6501
P6502
JK6501
PHONES
JK6502
MIC
JK6504
SYNCHRO EDIT
JK6503
EDIT 5P
6
7
8
9
10
11
12
13

VR C.B.A. (VEP06926C)



PICTURE
VR6502
W1
PHONES
VR6501
Hi-Fi REC
VR6503
IR6501
SW6501
POWER
SW6502
EJECT
PS6501
PS6502
P6502
W101
W102
W103
W104
W105
W106
W107
W109
W110
W111
W2
W3
W4
W5
W6
W7
W8
W9
W10
W11
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W41
W43
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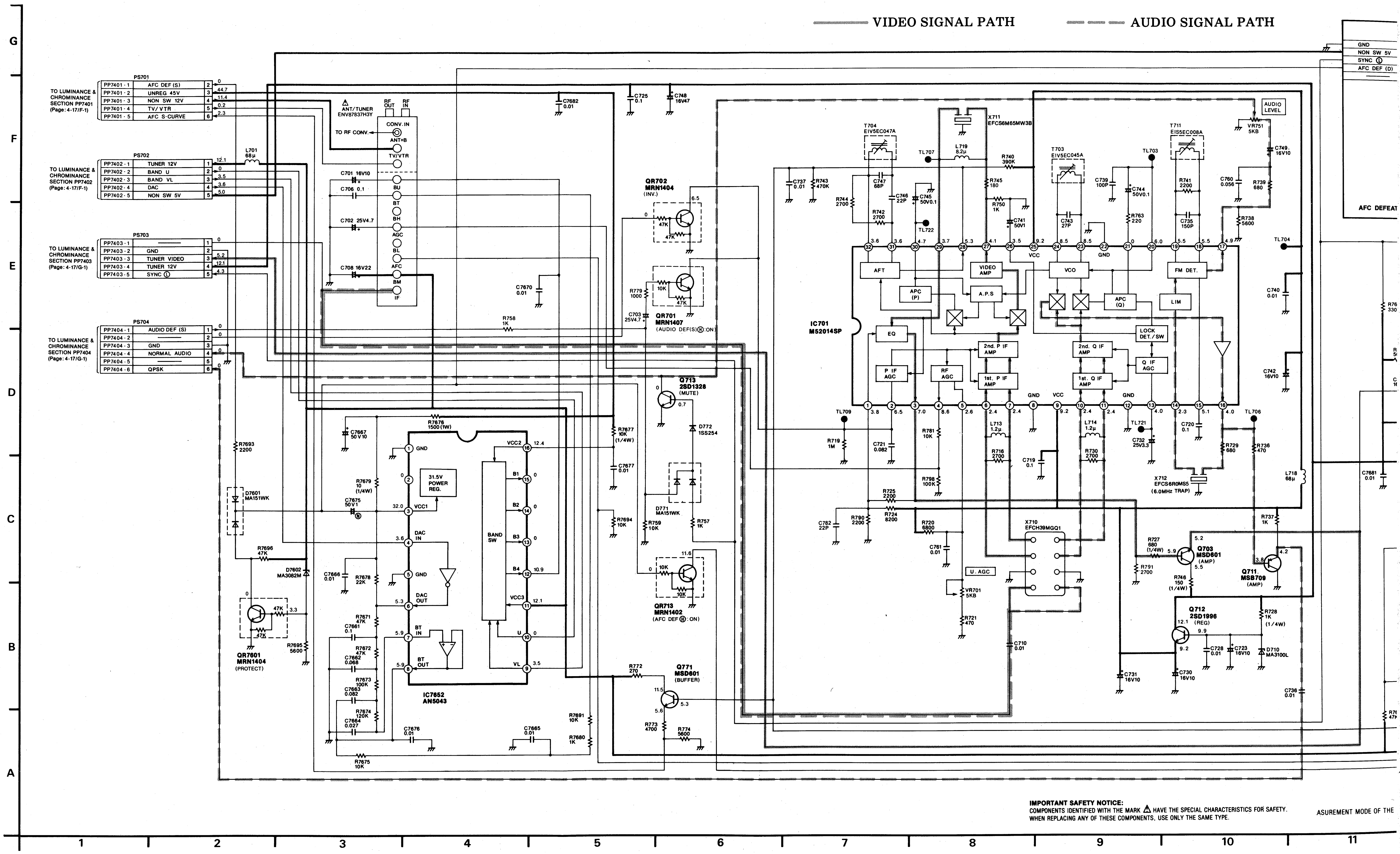
W45
W46
W47
W48
W49
W50
W51
W52
W53
W54
W55
C6501
C6502
C6503
C6504
C6505
C6506
C6507
C6508
C6509
C6510
C6511
C6512
C6513
C6514
C6515
C6516
L6501
L6502
L6503
L6504
L6506
L6507
R6501
R6502
R6503
R6504
R6505
R6506
R6508
R6509
R6511
IC6501
T5
T5'
JK6501
PHONES
JK6502
MIC
JK6504
SYNCHRO
EDIT
JK6503
EDIT
5P
JK6506(AV3)
AUDIO
IN (R)
JK6505(AV3)
AUDIO
IN (L)
JK6507(AV3)
VIDEO
IN
JK6508(AV3)
S-VIDEO
IN
10
11
12
13
14
15
16

TIMER C.B.A. & VR C.B.A.	
Transistor	
Q1701	B-2
Q7501	A-7
Q7502	A-7
Transistor & Resistor	
QR7501	D-3
QR7502	D-3
QR7503	D-3
QR7506	C-7
QR7507	B-7
QR7508	A-3
QR7509	A-3
QR7510	B-3
QR7511	A-2
QR7512	B-6
QR7513	B-6
QR7514	B-6
Integrated Circuit	
IC6501	B-13
IC7501	D-6
IC7502	B-5
IC7503	B-7
IC7504	B-7
IC7505	D-2
Adjustment	
C7501	D-4
VR4004	D-1
VR6501	C-12
VR6502	C-10
VR6503	C-13
Connector	
P6502	A-10
P7501	A-4
P7502	A-4
P7503	A-8
P7504	A-8
P7505	B-2
P7506	B-7
PP7501	B-10
PP7502	B-10
PS6501	B-10
PS6502	B-10

ADDRESS INFORMATION

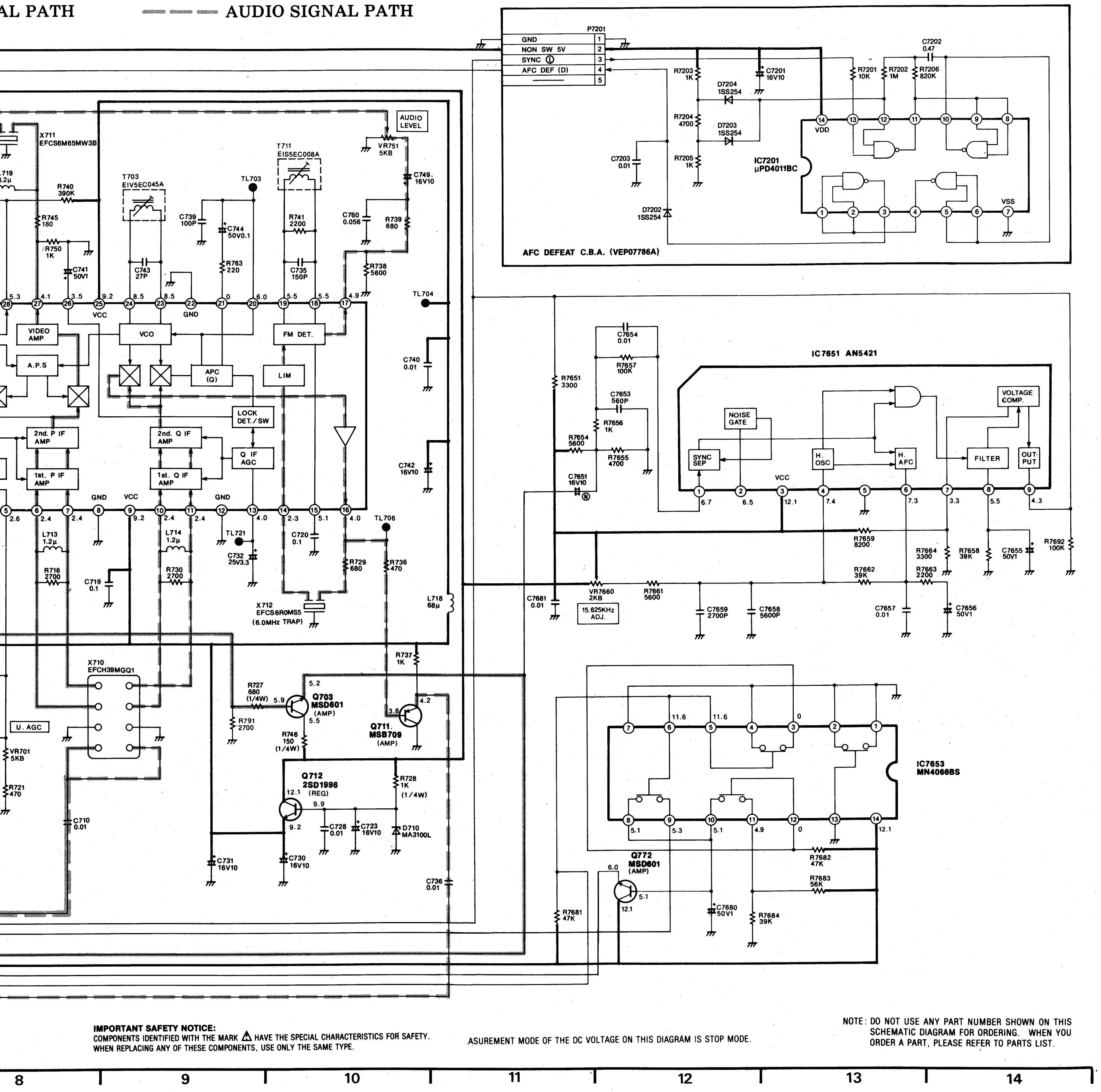
4-25. TV DEMODULATOR PACK SCHEMATIC DIAGRAM (AG-4700B)


VIDEO SIGNAL PATH
AUDIO SIGNAL PATH
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11
PS701
TO LUMINANCE & CHROMINANCE SECTION PP7401 (Page: 4-17/F-1)
PP7401-1 AFC DEF (S)
PP7401-2 UNREG 45V
PP7401-3 NON SW 12V
PP7401-4 TV/VTR
PP7401-5 AFC S-CURVE
PS702
TO LUMINANCE & CHROMINANCE SECTION PP7402 (Page: 4-17/F-1)
PP7402-1 TUNER 12V
PP7402-2 BAND U
PP7402-3 BAND VL
PP7402-4 DAC
PP7402-5 NON SW 5V
PS703
TO LUMINANCE & CHROMINANCE SECTION PP7403 (Page: 4-17/G-1)
PP7403-1
PP7403-2 GND
PP7403-3 TUNER VIDEO
PP7403-4 TUNER 12V
PP7403-5 SYNC Ⓛ
PS704
TO LUMINANCE & CHROMINANCE SECTION PP7404 (Page: 4-17/G-1)
PP7404-1 AUDIO DEF (S)
PP7404-2
PP7404-3 GND
PP7404-4 NORMAL AUDIO
PP7404-5
PP7404-6 QPSK
L701 68µ
ANT/TUNER ENV87837H3Y
RF OUT
RF IN
CONV. IN
TO RF CONV.
ANT+B
TV/VTR
BU
BT
BH
AGC
BL
AFC
BM
IF
C701 16V10
C706 0.1
C702 25V4.7
C708 16V22
C7682 0.01
C7670 0.01
R758 1K
C725 0.1
C748 16V47
QR702 MRN1404 (INV.)
47K
R779 1000
10K
C703 25V4.7
QR701 MRN1407 (AUDIO DEF(S)Ⓗ:ON)
Q713 2SD1328 (MUTE)
D772 1SS254
D771 MA151WK
R759 10K
R757 1K
QR713 MRN1402 (AFC DEF Ⓗ: ON)
Q771 MSD601 (BUFFER)
R772 270
R773 4700
R774 5600
R7677 10K (1/4W)
C7677 0.01
R7694 10K
R7691 10K
R7680 1K
C7665 0.01
R7676 1500 (1W)
C7667 50V10
R7679 10 (1/4W)
C7675 50V1
31.5V POWER REG.
VCC1
VCC2
DAC IN
DAC OUT
BT IN
BT OUT
GND
BAND SW
B1
B2
B3
B4
VCC3
U
VL
IC7652 AN5043
C7666 0.01
R7678 22K
R7671 47K
C7661 0.1
R7672 47K
C7662 0.068
R7673 100K
C7663 0.082
R7674 120K
C7664 0.027
C7676 0.01
R7675 10K
R7693 2200
D7601 MA151WK
R7696 47K
D7602 MA3082M
QR7601 MRN1404 (PROTECT)
R7695 5600
T704 EIV5EC047A
TL707
L719 8.2µ
X711 EFCS6M65MW3B
R740 390K
T703 EIV5EC045A
TL703
T711 EIS5EC008A
AUDIO LEVEL
VR751 5KB
C749 16V10
C737 0.01
R743 470K
R744 2700
C747 68P
C746 22P
C745 50V0.1
R742 2700
TL722
R745 180
R750 1K
C741 50V1
C743 27P
C739 100P
C744 50V0.1
R763 220
R741 2200
C735 150P
C760 0.056
R739 680
R738 5600
TL704
C740 0.01
AFT
VIDEO AMP
VCO
FM DET.
APC (P)
A.P.S
APC (Q)
LIM
EQ
LOCK DET./SW
2nd. P IF AMP
2nd. Q IF AMP
Q IF AGC
P IF AGC
RF AGC
1st. P IF AMP
1st. Q IF AMP
IC701 M52014SP
VCC
GND
TL709
R719 1M
C721 0.082
R781 10K
L713 1.2µ
R716 2700
C719 0.1
L714 1.2µ
R730 2700
TL721
C732 25V3.3
C720 0.1
R729 680
R736 470
TL706
C742 16V10
X712 EFCS6R0MS5 (6.0MHz TRAP)
L718 68µ
C7681 0.01
R798 100K
R725 2200
R724 8200
R790 2200
C782 22P
R720 6800
C761 0.01
X710 EFCH39MGQ1
U. AGC
VR701 5KB
R721 470
C710 0.01
C731 16V10
R727 680 (1/4W)
R791 2700
Q703 MSD601 (AMP)
R746 150 (1/4W)
R737 1K
Q711 MSB709 (AMP)
Q712 2SD1996 (REG)
R728 1K (1/4W)
C728 0.01
C723 16V10
D710 MA3100L
C730 16V10
C736 0.01
GND
NON SW 5V
SYNC Ⓛ
AFC DEF (D)
AFC DEFEAT

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

ASUREMENT MODE OF THE

AL PATH ━ ━ ━ AUDIO SIGNAL PATH


P7201
GND
NON SW 5V
SYNC
AFC DEF (D)
IC7201
μPD4011BC
VDD
VSS
AFC DEFEAT C.B.A. (VEP07786A)
IC7651 AN5421
NOISE GATE
SYNC SEP
H. OSC
H. AFC
FILTER
VOLTAGE COMP.
OUT-PUT
VCC
VR7660 2KB
15.625KHz ADJ.
IC7653
MN4066BS
Q772
MSD601
(AMP)
X711 EFCS6M65MW3B
T703 EIV5EC045A
T711 EIS5EC008A
AUDIO LEVEL
VR751 5KB
TL703
TL704
TL706
TL721
VIDEO AMP
VCO
FM DET.
A.P.S
APC (Q)
LIM
LOCK DET./SW
2nd. P IF AMP
1st. P IF AMP
2nd. Q IF AMP
1st. Q IF AMP
Q IF AGC
GND
VCC
X712 EFCS6R0MS5 (6.0MHz TRAP)
X710 EFCH39MGQ1
U. AGC
VR701 5KB
Q703 MSD601 (AMP)
Q711 MSB709 (AMP)
Q712 2SD1996 (REG)
D710 MA3100L
L718 68μ
8
9
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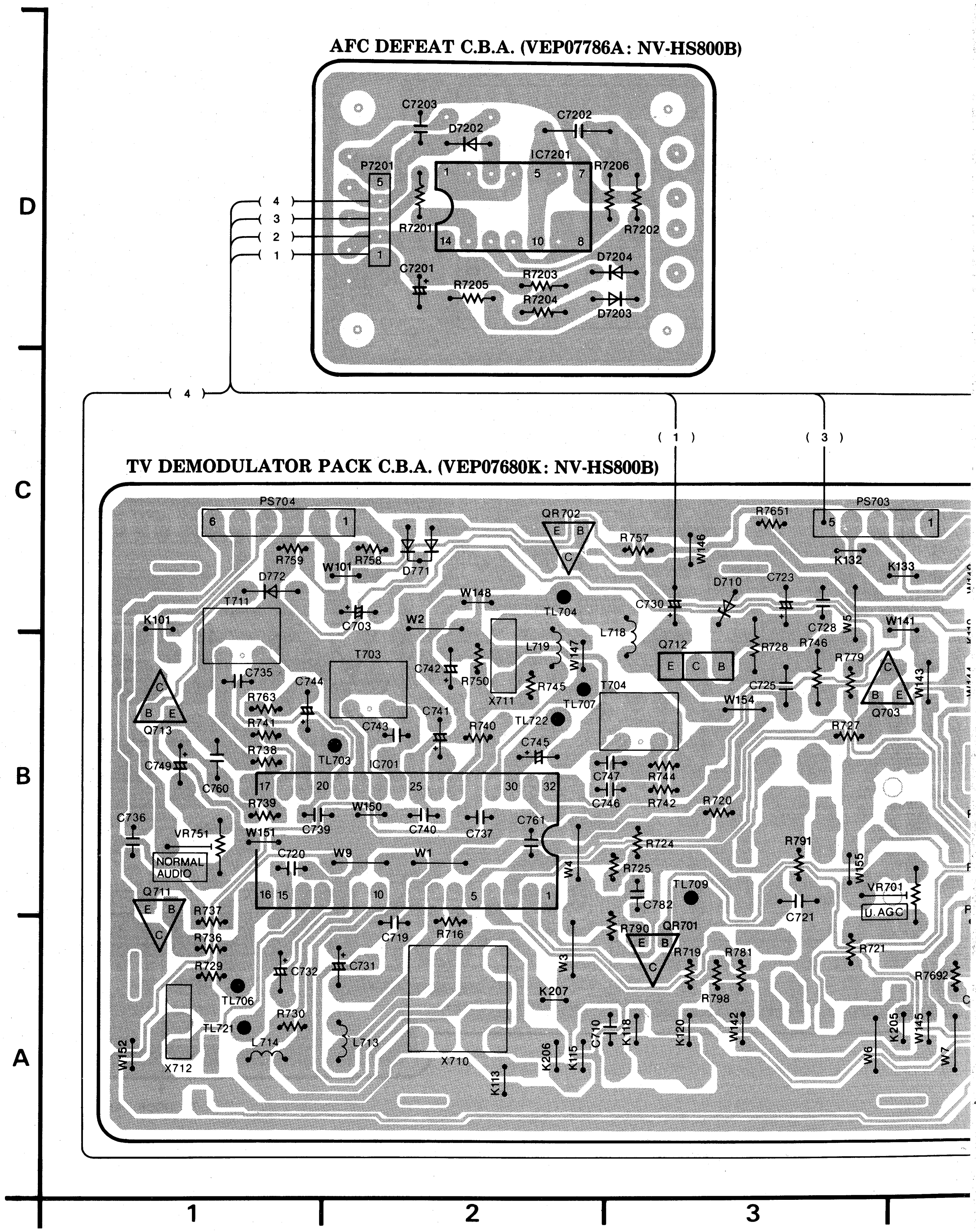
11
12
13
14

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

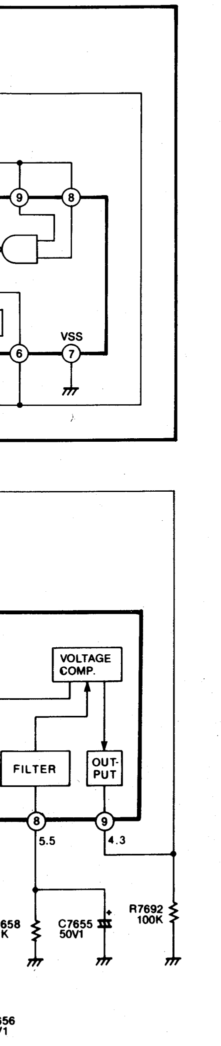
ASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-26. TV DEMODULATOR PACK C.B.A. (VEP07680K: AG-4700B)


AFC DEFEAT C.B.A. (VEP07786A: NV-HS800B)

TV DEMODULATOR PACK C.B.A. (VEP07680K: NV-HS800B)
D
C
B
A
1
2
3
C7203
C7202
D7202
IC7201
P7201
R7201
R7206
R7202
C7201
R7205
R7203
R7204
D7204
D7203
PS704
PS703
QR702
R7651
T711
T703
T704
X711
X710
X712
VR751
NORMAL AUDIO
VR701
U.AGC
Q713
Q711
Q712
Q703
QR701
IC701
TL703
TL704
TL706
TL707
TL709
TL721
TL722
D710
D771
D772
L713
L714
L718
L719


VSS
VOLTAGE COMP.
FILTER
OUT-PUT
5.5
4.3
C7655 50V1
R7692 100K

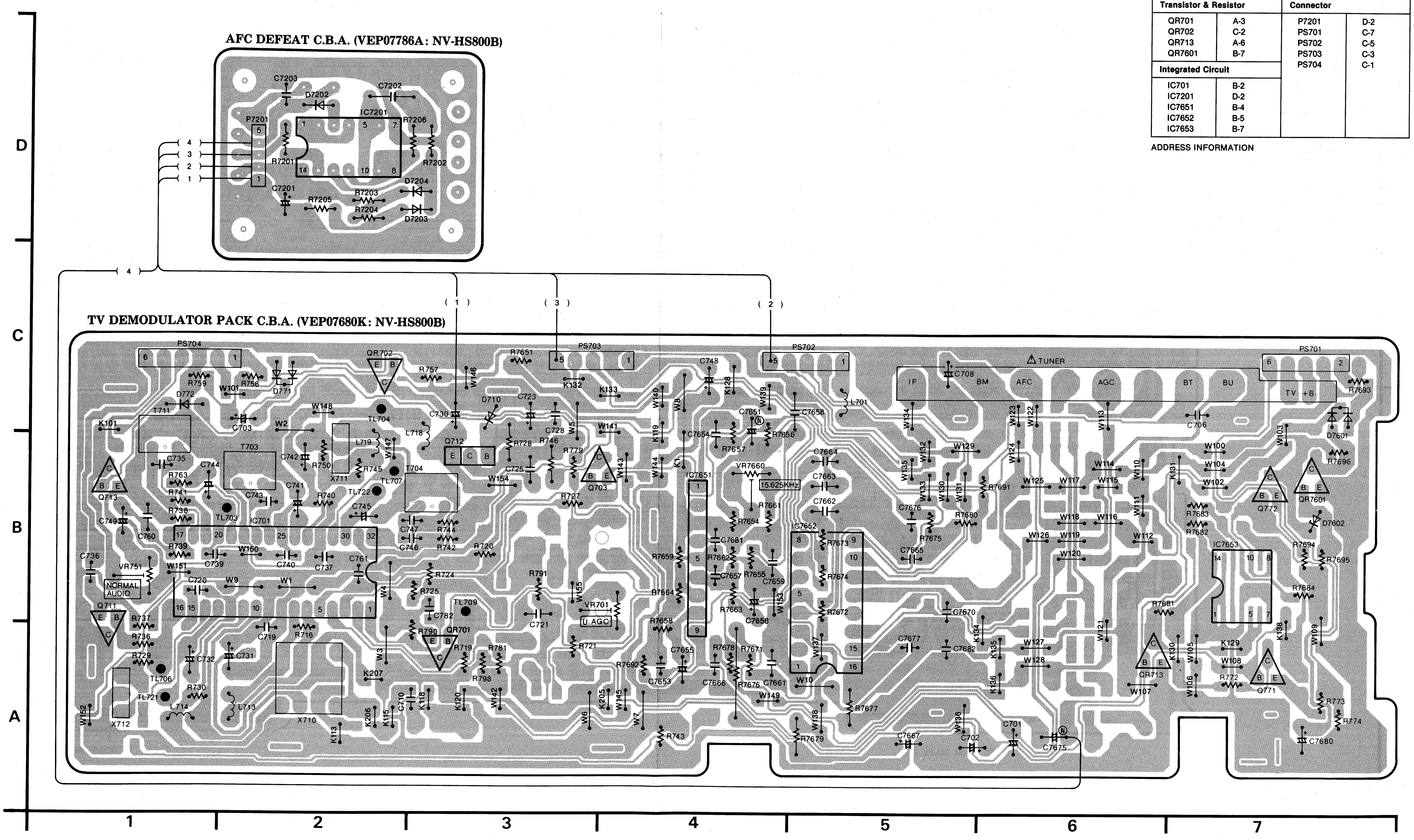
NUMBER SHOWN ON THIS
R ORDERING. WHEN YOU
EFER TO PARTS LIST.

4-26. TV DEMODULATOR PACK C.B.A. (VEP07680K: AG-4700B)

TV DEMODULATOR PACK C.B.A.

Transistor		Adjustment	
Q703	B-3	T703	B-2
Q711	B-1	T704	B-3
Q712	B-3	T711	C-1
Q713	B-1	VR701	B-4
Q771	A-7	VR751	B-1
Q772	B-7	VR7660	B-4
Transistor & Resistor		**Connector**	
QR701	A-3	P7201	D-2
QR702	C-2	PS701	C-7
QR713	A-6	PS702	C-5
QR7601	B-7	PS703	C-3
Integrated Circuit		PS704	C-1
IC701	B-2		
IC7201	D-2		
IC7651	B-4		
IC7652	B-5		
IC7653	B-7		

ADDRESS INFORMATION



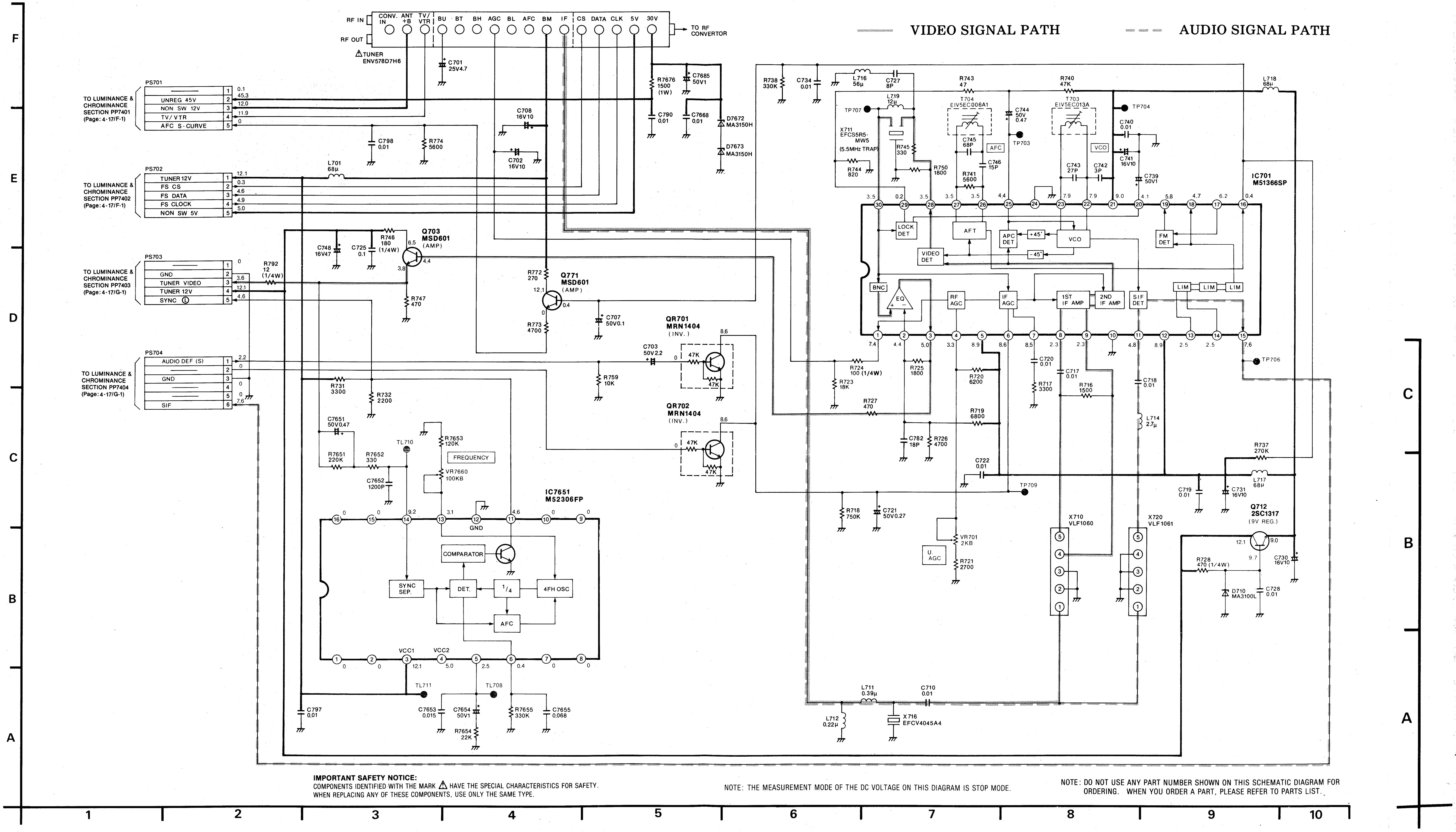
AFC DEFEAT C.B.A. (VEP07786A: NV-HS800B)

TV DEMODULATOR PACK C.B.A. (VEP07680K: NV-HS800B)

D
C
B
A
1
2
3
4
5
6
7
P7201
C7203
C7202
D7202
IC7201
R7206
R7201
R7202
D7204
C7201
R7205
R7203
R7204
D7203
PS704
QR702
R757
W146
R7651
PS703
C748
K128
PS702
TUNER
PS701
IF
BM
AFC
AGC
BT
BU
TV +B
R7693
C708
D772
T711
K101
C703
W148
TL704
D710
C723
C730
L718
Q712
C728
R728
R746
W141
K132
K133
W140
W8
L701
C7651
C7658
C7654
R7656
R7657
VR7660
15.625KHz
C7664
C7663
C7662
C706
D7601
W100
W104
W102
R7696
Q713
T703
C735
C744
R763
R741
R738
C743
C741
R740
TL722
C745
TL703
IC701
X711
R745
TL707
T704
W154
C725
R779
Q703
R727
IC7651
R7661
R7654
IC7652
R7673
R7674
R7672
W125
W117
W115
W114
W118
W116
W126
W119
W120
Q772
QR7601
D7602
R7683
R7682
IC7653
R7694
R7695
R7684
C749
C760
C736
VR751
NORMAL AUDIO
W151
R739
W160
C739
C740
C737
C761
C747
C746
R744
R742
R720
C720
W9
W1
R724
R725
TL709
C782
R791
C721
VR701
U.AGC
W155
R7659
R7664
R7658
C7681
R7662
C7657
R7655
C7659
R7663
C7656
C7665
C7670
C7677
C7682
W127
W128
R7681
QR713
K129
W108
R772
Q771
W107
Q711
R737
R736
R729
C732
C731
C719
R716
R790
QR701
R719
R781
R798
TL706
R730
TL721
L714
L713
X712
X710
K207
K206
K115
C710
K118
K120
W142
K113
W6
K205
W145
W7
R743
R7692
C7653
C7655
R7678
R7671
C7666
R7676
C7661
W10
W149
R7677
W138
R7679
C7667
C702
C701
C7675
R773
R774
C7680

4-27. TV DEMODULATOR PACK SCHEMATIC DIAGRAM (AG-4700E)

4-28.


VIDEO SIGNAL PATH
AUDIO SIGNAL PATH
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
RF IN
RF OUT
CONV. IN
ANT +B
TV/VTR
BU
BT
BH
AGC
BL
AFC
BM
IF
CS
DATA
CLK
5V
30V
TO RF CONVERTOR
TUNER ENV578D7H6
C701 25V4.7
PS701
TO LUMINANCE & CHROMINANCE SECTION PP7401 (Page: 4-17/F-1)
UNREG 45V
NON SW 12V
TV/VTR
AFC S-CURVE
PS702
TO LUMINANCE & CHROMINANCE SECTION PP7402 (Page: 4-17/F-1)
TUNER 12V
FS CS
FS DATA
FS CLOCK
NON SW 5V
PS703
TO LUMINANCE & CHROMINANCE SECTION PP7403 (Page: 4-17/G-1)
GND
TUNER VIDEO
TUNER 12V
SYNC
PS704
TO LUMINANCE & CHROMINANCE SECTION PP7404 (Page: 4-17/G-1)
AUDIO DEF (S)
GND
SIF
R7676 1500 (1W)
C7685 50V1
C790 0.01
C7668 0.01
D7672 MA3150H
D7673 MA3150H
C708 16V10
C702 16V10
C798 0.01
R774 5600
L701 68μ
C748 16V47
C725 0.1
R746 180 (1/4W)
Q703 MSD601 (AMP)
R792 12 (1/4W)
R747 470
R772 270
Q771 MSD601 (AMP)
R773 4700
C707 50V0.1
QR701 MRN1404 (INV.)
C703 50V2.2
47K
R759 10K
QR702 MRN1404 (INV.)
R731 3300
R732 2200
C7651 50V0.47
R7651 220K
R7652 330
C7652 1200P
TL710
R7653 120K
FREQUENCY
VR7660 100KB
IC7651 M52306FP
GND
COMPARATOR
SYNC SEP.
DET.
1/4
4FH OSC
AFC
VCC1
VCC2
TL711
TL708
C797 0.01
C7653 0.015
C7654 50V1
R7654 22K
R7655 330K
C7655 0.068
R738 330K
C734 0.01
L716 56μ
C727 8P
L719 12μ
TP707
X711 EFCS5R5-MW5 (5.5MHz TRAP)
R744 820
R745 330
R750 1800
R743 47
T704 EIV5EC006A1
C745 68P
AFC
C746 15P
R741 5600
C744 50V 0.47
TP703
R740 47K
T703 EIV5EC013A
VCO
C743 27P
C742 3P
TP704
C740 0.01
C741 16V10
C739 50V1
L718 68μ
IC701 M51366SP
LOCK DET
AFT
APC DET
+45°
-45°
VCO
FM DET
VIDEO DET
BNC
EQ
RF AGC
IF AGC
1ST IF AMP
2ND IF AMP
SIF DET
LIM
TP706
R724 100 (1/4W)
R723 18K
R725 1800
R727 470
R720 6200
R719 6800
C720 0.01
R717 3300
C717 0.01
R716 1500
C718 0.01
L714 2.7μ
C782 18P
R726 4700
C722 0.01
TP709
R718 750K
C721 50V0.27
VR701 2KB
U AGC
R721 2700
X710 VLF1060
X720 VLF1061
R737 270K
L717 68μ
C719 0.01
C731 16V10
Q712 2SC1317 (9V REG.)
R728 470 (1/4W)
C730 16V10
D710 MA3100L
C728 0.01
L711 0.39μ
C710 0.01
L712 0.22μ
X716 EFCV4045A4

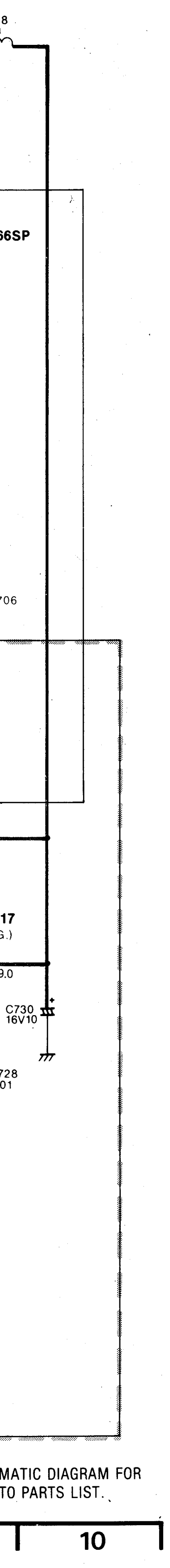
IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-28. TV DEMODULATOR PACK C.B.A. (VEP07749A: AG-4700E)

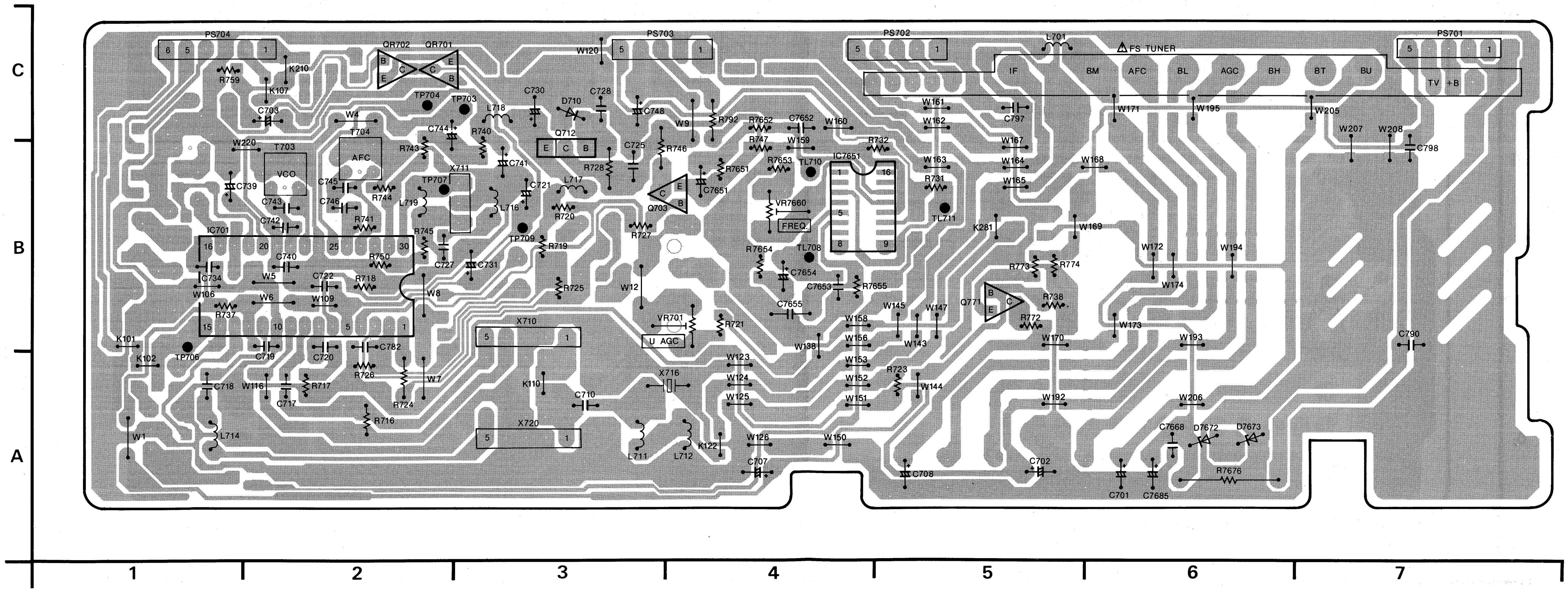
AL PATH


8
6SP
706
17
.)
9.0
C730
16V10
728
01
10

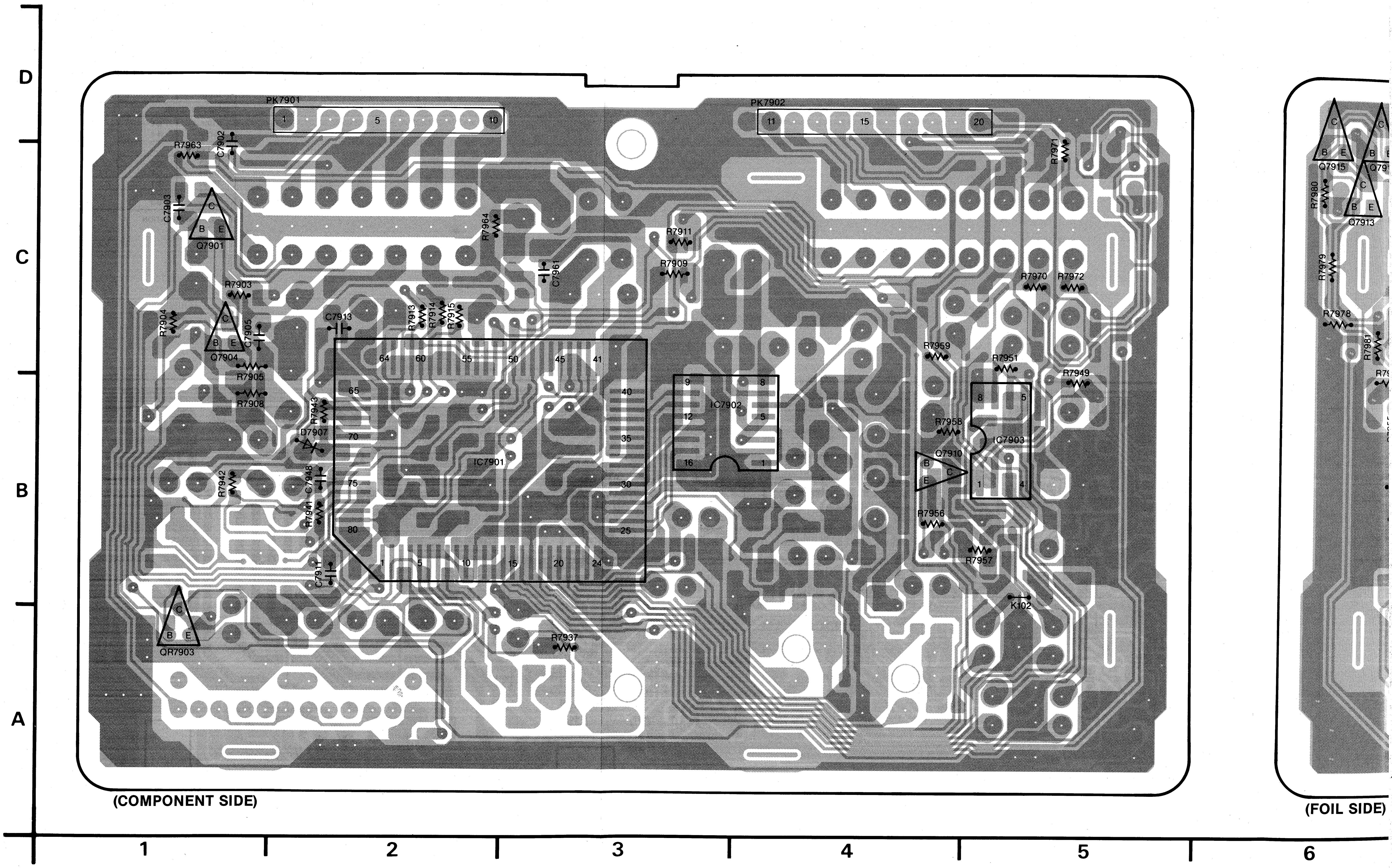
MATIC DIAGRAM FOR
TO PARTS LIST.

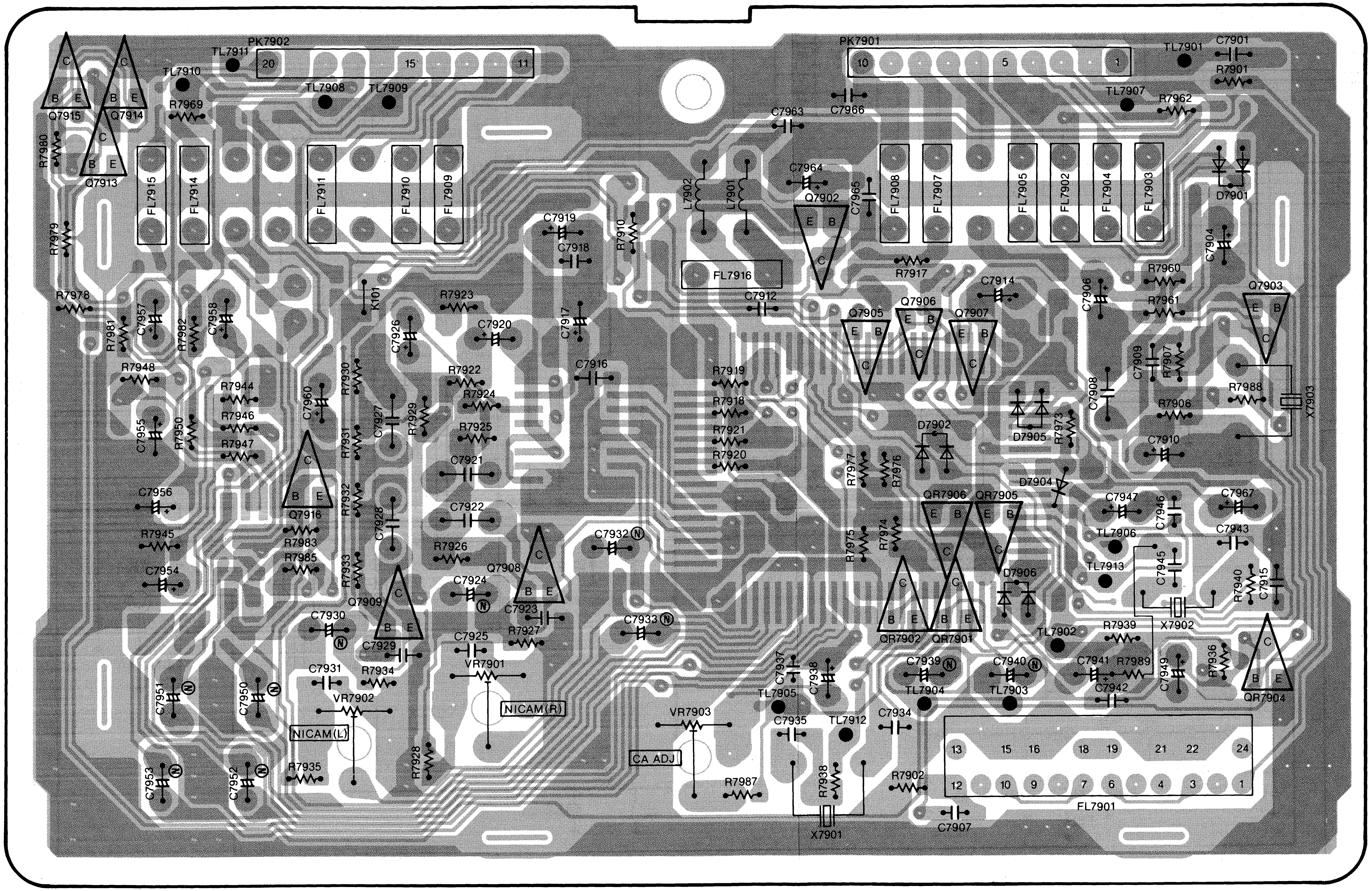
TV DEMODULATOR PACK C.B.A.			
Transistor		**Adjustment**	
Q703	B-3	T703	B-2
Q712	B-3	T704	B-2
Q771	B-5	VR701	B-4
Transistor & Resistor		VR7660	B-4
QR701	C-2	**Connector**	
QR702	C-2	PS701	C-7
Integrated Circuit		PS702	C-5
IC701	B-1	PS703	C-3
IC7651	B-4	PS704	C-1
Test Point			
TP703	C-3		
TP704	C-2		
TP706	A-1		
TP707	B-2		
TP709	B-3		

ADDRESS INFORMATION


C
B
A
1
2
3
4
5
6
7
PS704
6 5 1
R759
K210
K107
C703
QR702
QR701
TP704
TP703
W4
T704
AFC
W220
T703
VCO
C739
C745
C746
C743
C742
R744
R741
IC701
16 20 25 30
15 10 5 1
C740
R750
C734
W5
C722
R718
W106
W6
W109
R737
K101
K102
TP706
C719
C720
C782
C718
W116
R717
C717
R726
R724
W7
W8
R716
L714
W1
L718
C744
R740
R743
X711
TP707
L719
C741
R745
C727
C731
TP709
L716
C730
D710
C728
Q712
E C B
C721
L717
R720
R719
R728
R725
X710
5 1
K110
C710
X720
5 1
PS703
W120
5 1
C748
C725
R746
W9
R792
Q703
C7651
R7651
R727
W12
VR701
U AGC
R721
X716
L711
L712
K122
R7652
R747
C7652
W159
W160
R7653
TL710
IC7651
1 16
5
8 9
R732
VR7660
FREQ.
R7654
TL708
C7654
C7653
R7655
C7655
W138
W123
W124
W125
W126
W150
C707
PS702
5 1
L701
FS TUNER
IF BM AFC BL AGC BH BT BU
TV +B
W161
W162
C797
W163
R731
TL711
W167
W164
W165
K281
W158
W156
W153
W152
W151
W145
W143
W147
W144
R723
Q771
B C E
R773
R774
R738
R772
W168
W169
W170
W171
W172
W174
W173
W192
W193
W194
W195
W205
W206
W207
W208
C798
C790
PS701
5 1
C708
C702
C701
C7685
C7668
D7672
D7673
R7676

4-29. NICAM DECODER PACK C.B.A. (VEP07675A: AG-4700B)


D
C
B
A
1
2
3
4
5
6
PK7901
PK7902
R7963
C7902
C7903
Q7901
R7964
R7911
R7909
C7961
R7971
R7970
R7972
R7903
R7904
Q7904
C7905
C7913
R7913
R7914
R7915
R7905
R7908
R7943
D7907
IC7901
IC7902
IC7903
R7959
R7951
R7949
R7958
Q7910
R7942
C7948
R7941
R7956
R7957
C7911
K102
QR7903
R7937
Q7915
Q7913
R7980
R7979
R7978
R7981
(COMPONENT SIDE)
(FOIL SIDE)


PK7902
20
15
11
TL7911
TL7910
TL7908
TL7909
Q7915
Q7914
Q7913
R7969
R7980
R7979
R7978
FL7915
FL7914
FL7911
FL7910
FL7909
R7981
C7957
R7982
C7958
R7948
R7944
R7946
R7947
C7955
R7950
C7956
R7945
C7954
Q7916
R7983
R7985
C7960
R7930
R7931
R7932
R7933
C7927
C7928
R7929
K101
C7926
R7923
C7920
R7922
R7924
R7925
C7921
C7922
R7926
C7924
Q7909
Q7908
C7923
C7930
C7929
C7925
R7927
C7931
R7934
VR7901
VR7902
NICAM(R)
NICAM(L)
R7935
C7951
C7950
C7953
C7952
R7928
C7919
C7918
C7917
C7916
R7910
C7932
C7933
VR7903
CA ADJ
R7987
L7902
L7901
FL7916
C7912
C7963
C7964
C7965
C7966
Q7902
R7919
R7918
R7921
R7920
C7937
C7938
TL7905
C7935
TL7912
R7938
X7901
PK7901
10
5
1
TL7901
C7901
R7901
TL7907
R7962
FL7908
FL7907
FL7905
FL7902
FL7904
FL7903
D7901
R7917
C7914
Q7905
Q7906
Q7907
C7906
R7960
R7961
C7904
Q7903
C7909
R7907
C7908
R7988
X7903
R7906
D7902
D7905
R7973
C7910
R7977
R7976
D7904
QR7906
QR7905
C7947
C7946
C7967
R7975
R7974
TL7906
C7943
TL7913
C7945
D7906
R7940
C7915
X7902
QR7902
QR7901
TL7902
R7939
C7939
C7940
C7941
R7989
C7949
R7936
QR7904
TL7904
TL7903
C7942
C7934
R7902
C7907
13
15
16
18
19
21
22
24
12
10
9
7
6
4
3
1
FL7901
C
B
E
N

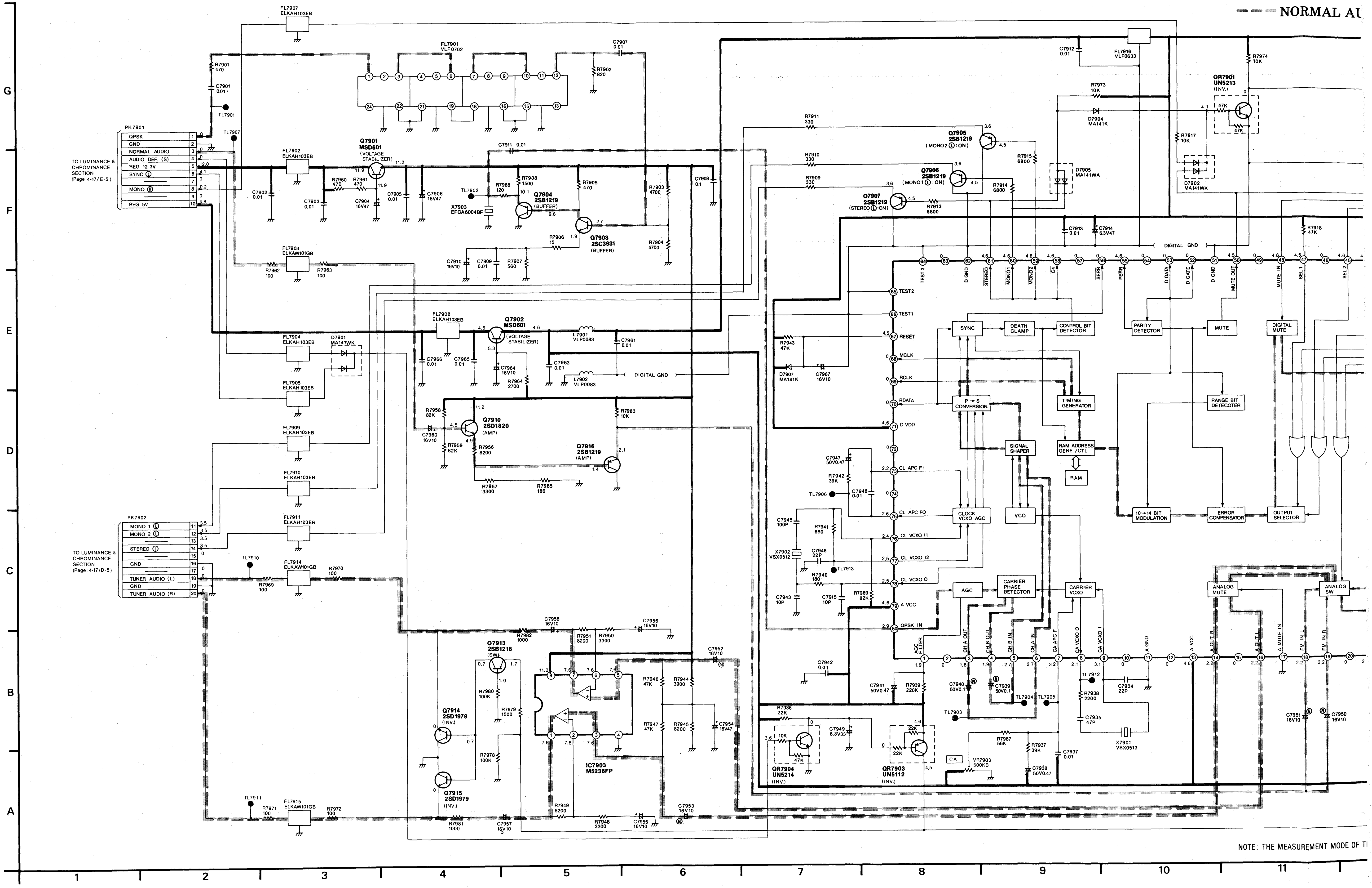
(FOIL SIDE)

NICAM DECODER PACK C.B.A.	
Transistor	
Q7901	C-1
Q7902	C-9
Q7903	C-10
Q7904	C-1
Q7905	C-9
Q7906	C-9
Q7907	C-9
Q7908	B-8
Q7909	B-7
Q7910	B-4
Q7913	C-6
Q7914	D-6
Q7915	D-6
Q7916	B-7
Transistor & Resistor	
QR7901	B-5
QR7902	B-9
QR7903	A-1
QR7904	A-10
QR7905	B-9
QR7906	B-9
Integrated Circuit	
IC7901	B-2
IC7902	B-3
IC7903	B-5
Adjustment	
VR7901	A-8
VR7902	A-7
VR7903	A-8
Connector	
PK7901	D-2
PK7901	D-9
PK7902	D-4
PK7902	D-7

ADDRESS INFORMATION

6 7 8 9 10

4-30. NICAM DECODER PACK SCHEMATIC DIAGRAM (AG-4700B)


PK7901
QPSK
GND
NORMAL AUDIO
AUDIO DEF. (S)
REG 12.3V
SYNC Ⓛ
MONO Ⓗ
REG 5V
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-17/ E-5)
PK7902
MONO 1 Ⓛ
MONO 2 Ⓛ
STEREO Ⓛ
GND
TUNER AUDIO (L)
GND
TUNER AUDIO (R)
TO LUMINANCE & CHROMINANCE SECTION (Page: 4-17/ D-5)
FL7907 ELKAH103EB
FL7901 VLF0702
FL7902 ELKAH103EB
FL7903 ELKAW101GB
FL7904 ELKAH103EB
FL7905 ELKAH103EB
FL7908 ELKAH103EB
FL7909 ELKAH103EB
FL7910 ELKAH103EB
FL7911 ELKAH103EB
FL7914 ELKAW101GB
FL7915 ELKAW101GB
FL7916 VLF0633
Q7901 MSD601 (VOLTAGE STABILIZER)
Q7902 MSD601 (VOLTAGE STABILIZER)
Q7903 2SC3931 (BUFFER)
Q7904 2SB1219 (BUFFER)
Q7905 2SB1219 (MONO2 Ⓛ: ON)
Q7906 2SB1219 (MONO1 Ⓛ: ON)
Q7907 2SB1219 (STEREO Ⓛ: ON)
Q7910 2SD1820 (AMP)
Q7916 2SB1219 (AMP)
Q7913 2SB1218 (SW)
Q7914 2SD1979 (INV.)
Q7915 2SD1979 (INV.)
QR7901 UN5213 (INV.)
QR7903 UN5112 (INV.)
QR7904 UN5214 (INV.)
IC7903 M5238FP
X7901 VSX0513
X7902 VSX0512
X7903 EFCA6004BF
D7901 MA141WK
D7902 MA141WK
D7904 MA141K
D7905 MA141WA
D7907 MA141K
L7901 VLP0083
L7902 VLP0083
VR7903 500KB
TL7901
TL7902
TL7903
TL7904
TL7905
TL7906
TL7907
TL7910
TL7911
TL7912
TL7913
DIGITAL GND
TEST 3
D GND
STEREO
MONO1
MONO2
CA
SERR
PERR
D DATA
D GATE
D GND
MUTE OUT
MUTE IN
SEL 1
SEL 2
TEST2
TEST1
RESET
MCLK
RCLK
RDATA
D VDD
CL APC FI
CL APC FO
CL VCXO I1
CL VCXO I2
CL VCXO O
A VCC
QPSK IN
AGC FILTER
CH A OUT
CH B OUT
CH B IN
CH A IN
CA APC F
CA VCXO O
CA VCXO I
A GND
A VCC
A OUT R
A OUT L
A MUTE IN
FM IN L
FM IN R
SYNC
DEATH CLAMP
CONTROL BIT DETECTOR
PARITY DETECTOR
MUTE
DIGITAL MUTE
P → S CONVERSION
TIMING GENERATOR
RANGE BIT DETECOTER
SIGNAL SHAPER
RAM ADDRESS GENE./CTL
RAM
CLOCK VCXO AGC
VCO
10→14 BIT MODULATION
ERROR COMPENSATOR
OUTPUT SELECTOR
AGC
CARRIER PHASE DETECTOR
CARRIER VCXO
ANALOG MUTE
ANALOG SW
CA
G
F
E
D
C
B
A
1
2
3
4
5
6
7
8
9
10
11

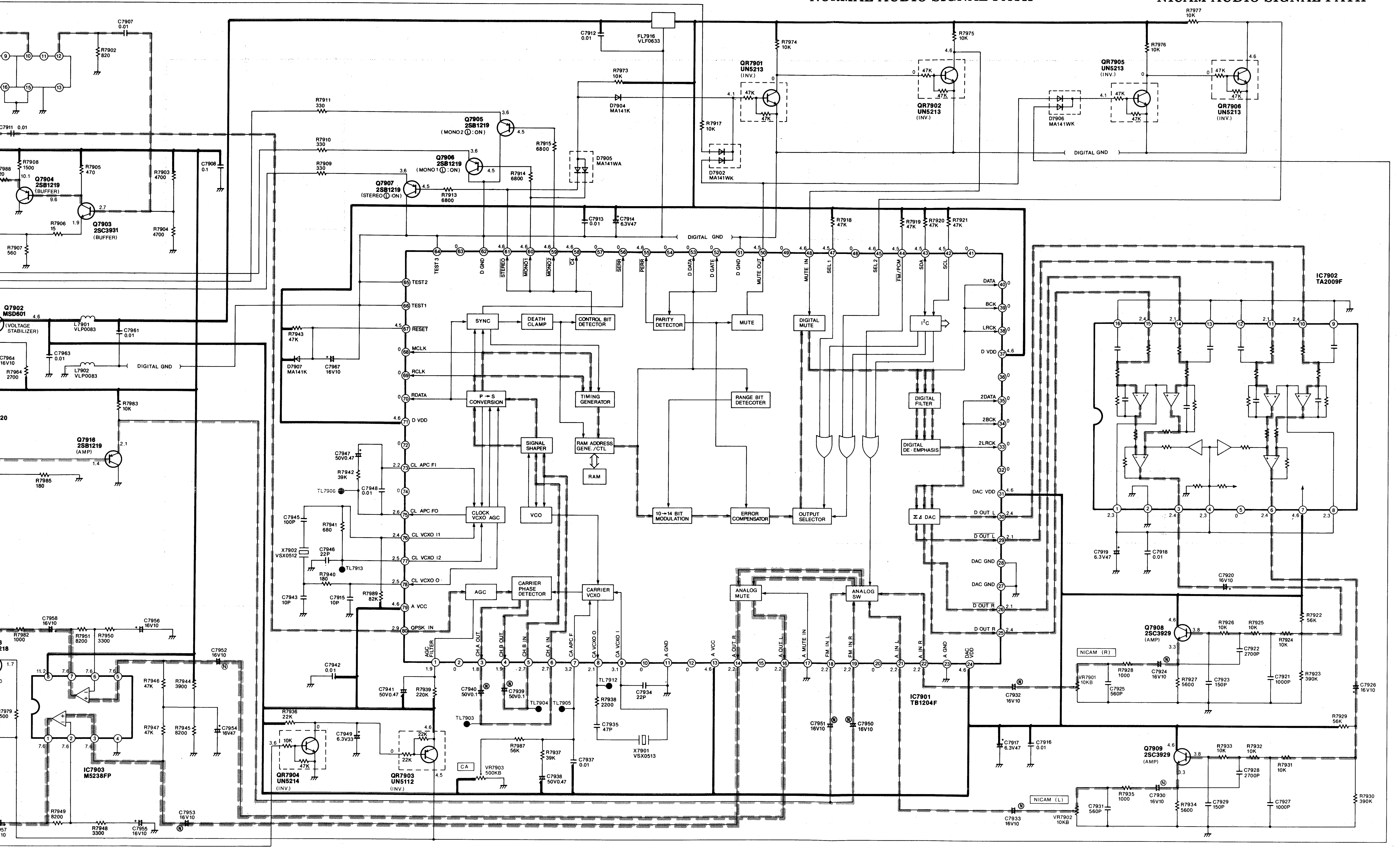
NORMAL AU

NOTE: THE MEASUREMENT MODE OF T

G-4700B)

NORMAL AUDIO SIGNAL PATH

NICAM AUDIO SIGNAL PATH

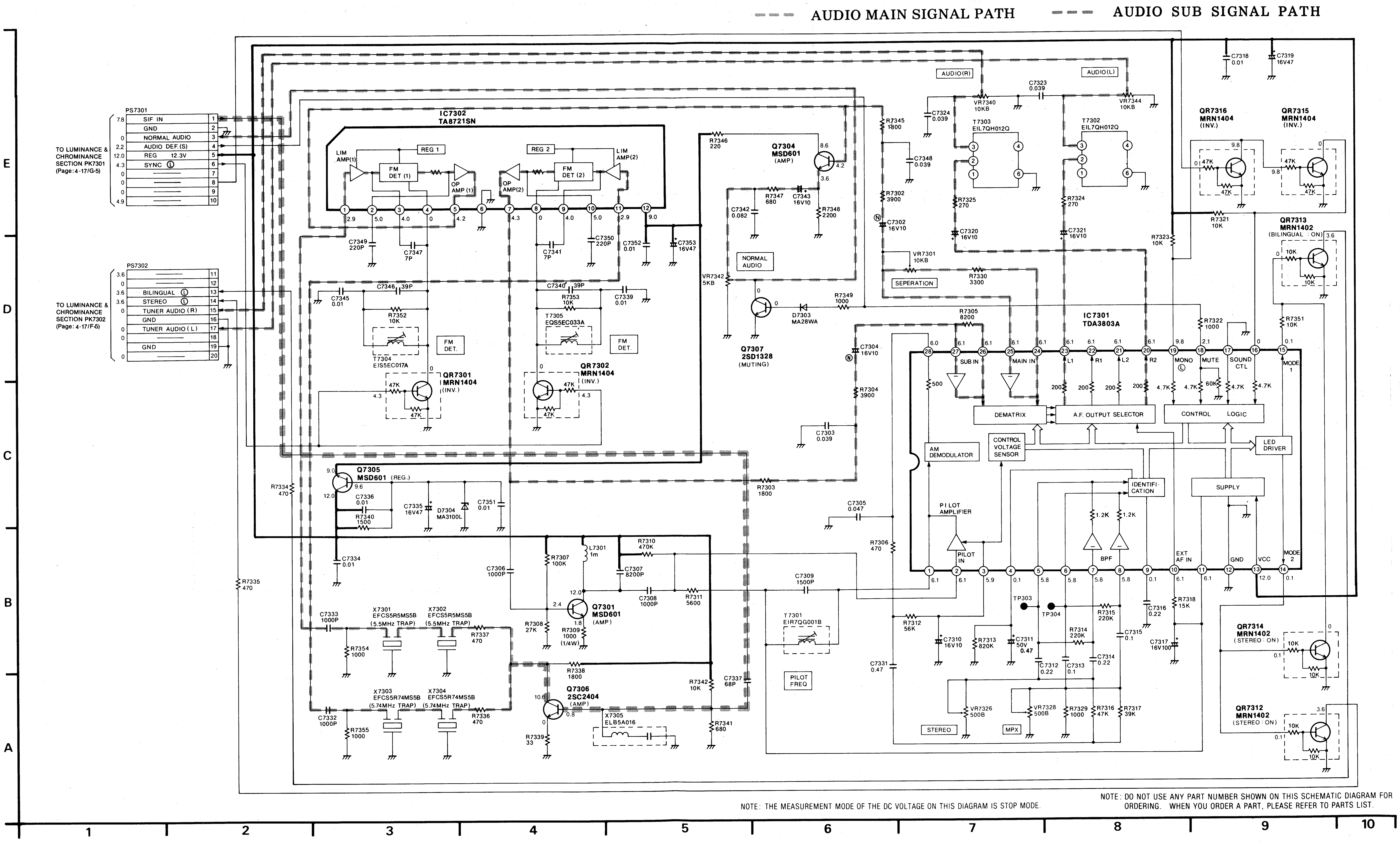

IC7901 TB1204F
IC7902 TA2009F
IC7903 M5238FP
Q7902 MSD601 (VOLTAGE STABILIZER)
Q7903 2SC3931 (BUFFER)
Q7904 2SB1219 (BUFFER)
Q7905 2SB1219 (MONO2 Ⓛ:ON)
Q7906 2SB1219 (MONO1 Ⓛ:ON)
Q7907 2SB1219 (STEREO Ⓛ:ON)
Q7908 2SC3929 (AMP)
Q7909 2SC3929 (AMP)
Q7916 2SB1219 (AMP)
QR7901 UN5213 (INV.)
QR7902 UN5213 (INV.)
QR7903 UN5112 (INV.)
QR7904 UN5214 (INV.)
QR7905 UN5213 (INV.)
QR7906 UN5213 (INV.)
FL7916 VLF0633
D7902 MA141WK
D7904 MA141K
D7905 MA141WA
D7906 MA141WK
D7907 MA141K
X7901 VSX0513
X7902 VSX0512
L7901 VLP0083
L7902 VLP0083
VR7901 10KB
VR7902 10KB
VR7903 500KB
DIGITAL GND
TEST3
D GND
STEREO
MONO1
MONO2
C4
SERR
PERR
D DATA
D GATE
MUTE OUT
MUTE IN
SEL1
SEL2
FM/PCM
SDA
SCL
TEST2
TEST1
RESET
MCLK
RCLK
RDATA
D VDD
CL APC FI
CL APC FO
CL VCXO I1
CL VCXO I2
CL VCXO O
A VCC
QPSK IN
DATA
BCK
LRCK
2DATA
2BCK
2LRCK
DAC VDD
D OUT L
DAC GND
D OUT R
SYNC
DEATH CLAMP
CONTROL BIT DETECTOR
PARITY DETECTOR
MUTE
DIGITAL MUTE
I²C
P→S CONVERSION
TIMING GENERATOR
RANGE BIT DETECOTER
DIGITAL FILTER
SIGNAL SHAPER
RAM ADDRESS GENE./CTL
RAM
DIGITAL DE-EMPHASIS
CLOCK VCXO AGC
VCO
10→14 BIT MODULATION
ERROR COMPENSATOR
OUTPUT SELECTOR
ΣΔ DAC
AGC
CARRIER PHASE DETECTOR
CARRIER VCXO
ANALOG MUTE
ANALOG SW
AGC FILTER
CH A OUT
CH B OUT
CH B IN
CH A IN
CA APC F
CA VCXO O
CA VCXO I
A GND
A VCC
A OUT R
A OUT L
A MUTE IN
FM IN L
FM IN R
A IN L
A IN R
DAC VDD
NICAM (R)
NICAM (L)
CA
TL7903
TL7904
TL7905
TL7906
TL7912
TL7913
5
6
7
8
9
10
11
12
13
14
15

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

4-31. DECODER PACK SCHEMATIC DIAGRAM (AG-4700E)

4-32. DEC


AUDIO MAIN SIGNAL PATH
AUDIO SUB SIGNAL PATH
PS7301
SIF IN
GND
NORMAL AUDIO
AUDIO DEF.(S)
REG 12.3V
SYNC Ⓛ
TO LUMINANCE & CHROMINANCE SECTION PK7301 (Page: 4-17/G-5)
PS7302
BILINGUAL Ⓛ
STEREO Ⓛ
TUNER AUDIO (R)
GND
TUNER AUDIO (L)
TO LUMINANCE & CHROMINANCE SECTION PK7302 (Page: 4-17/F-5)
IC7302
TA8721SN
REG 1
REG 2
LIM AMP(1)
LIM AMP(2)
FM DET (1)
FM DET (2)
OP AMP (1)
OP AMP(2)
C7349 220P
C7347 7P
C7341 7P
C7350 220P
C7352 0.01
C7353 16V47
C7345 0.01
C7346 39P
C7340 39P
C7339 0.01
R7352 10K
R7353 10K
T7304 EIS5EC017A
T7305 EQS5EC033A
FM DET.
QR7301 MRN1404 (INV.)
QR7302 MRN1404 (INV.)
Q7304 MSD601 (AMP)
R7346 220
R7347 680
C7343 16V10
C7342 0.082
R7348 2200
NORMAL AUDIO
VR7342 5KB
Q7307 2SD1328 (MUTING)
D7303 MA28WA
R7349 1000
R7345 1800
C7348 0.039
C7324 0.039
R7302 3900
C7302 16V10
VR7301 10KB
SEPERATION
R7330 3300
R7305 8200
C7304 16V10
R7304 3900
C7303 0.039
AUDIO(R)
AUDIO(L)
C7323 0.039
VR7340 10KB
VR7344 10KB
T7303 EIL7QH012Q
T7302 EIL7QH012Q
R7325 270
R7324 270
C7320 16V10
C7321 16V10
IC7301
TDA3803A
SUB IN
MAIN IN
DEMATRIX
A.F. OUTPUT SELECTOR
CONTROL LOGIC
MONO Ⓛ
MUTE
SOUND CTL
MODE 1
MODE 2
L1 R1 L2 R2
LED DRIVER
AM DEMODULATOR
CONTROL VOLTAGE SENSOR
IDENTIFICATION
SUPPLY
PILOT AMPLIFIER
PILOT IN
BPF
EXT AF IN
GND
VCC
R7323 10K
R7321 10K
R7322 1000
R7351 10K
C7318 0.01
C7319 16V47
QR7316 MRN1404 (INV.)
QR7315 MRN1404 (INV.)
QR7313 MRN1402 (BILINGUAL : ON)
QR7314 MRN1402 (STEREO : ON)
QR7312 MRN1402 (STEREO : ON)
Q7305 MSD601 (REG.)
R7334 470
C7336 0.01
R7340 1500
C7335 16V47
D7304 MA3100L
C7351 0.01
C7334 0.01
R7335 470
R7303 1800
C7305 0.047
R7306 470
Q7301 MSD601 (AMP)
R7307 100K
L7301 1m
R7310 470K
C7307 8200P
C7306 1000P
C7308 1000P
R7311 5600
R7308 27K
R7309 1000 (1/4W)
C7309 1500P
T7301 EIR7QG001B
PILOT FREQ
C7331 0.47
R7312 56K
C7310 16V10
R7313 820K
C7311 50V 0.47
TP303
TP304
R7315 220K
R7314 220K
C7312 0.22
C7313 0.1
C7314 0.22
C7315 0.1
C7316 0.22
R7318 15K
C7317 16V100
VR7326 500B
VR7328 500B
R7329 1000
R7316 47K
R7317 39K
STEREO
MPX
C7333 1000P
X7301 EFCS5R5MS5B (5.5MHz TRAP)
X7302 EFCS5R5MS5B (5.5MHz TRAP)
R7337 470
R7354 1000
X7303 EFCS5R74MS5B (5.74MHz TRAP)
X7304 EFCS5R74MS5B (5.74MHz TRAP)
R7336 470
C7332 1000P
R7355 1000
R7338 1800
Q7306 2SC2404 (AMP)
R7339 33
X7305 ELB5A016
R7342 10K
C7337 68P
R7341 680
E
D
C
B
A
1
2
3
4
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6
7
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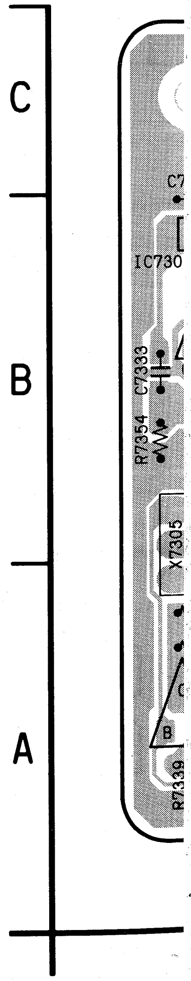
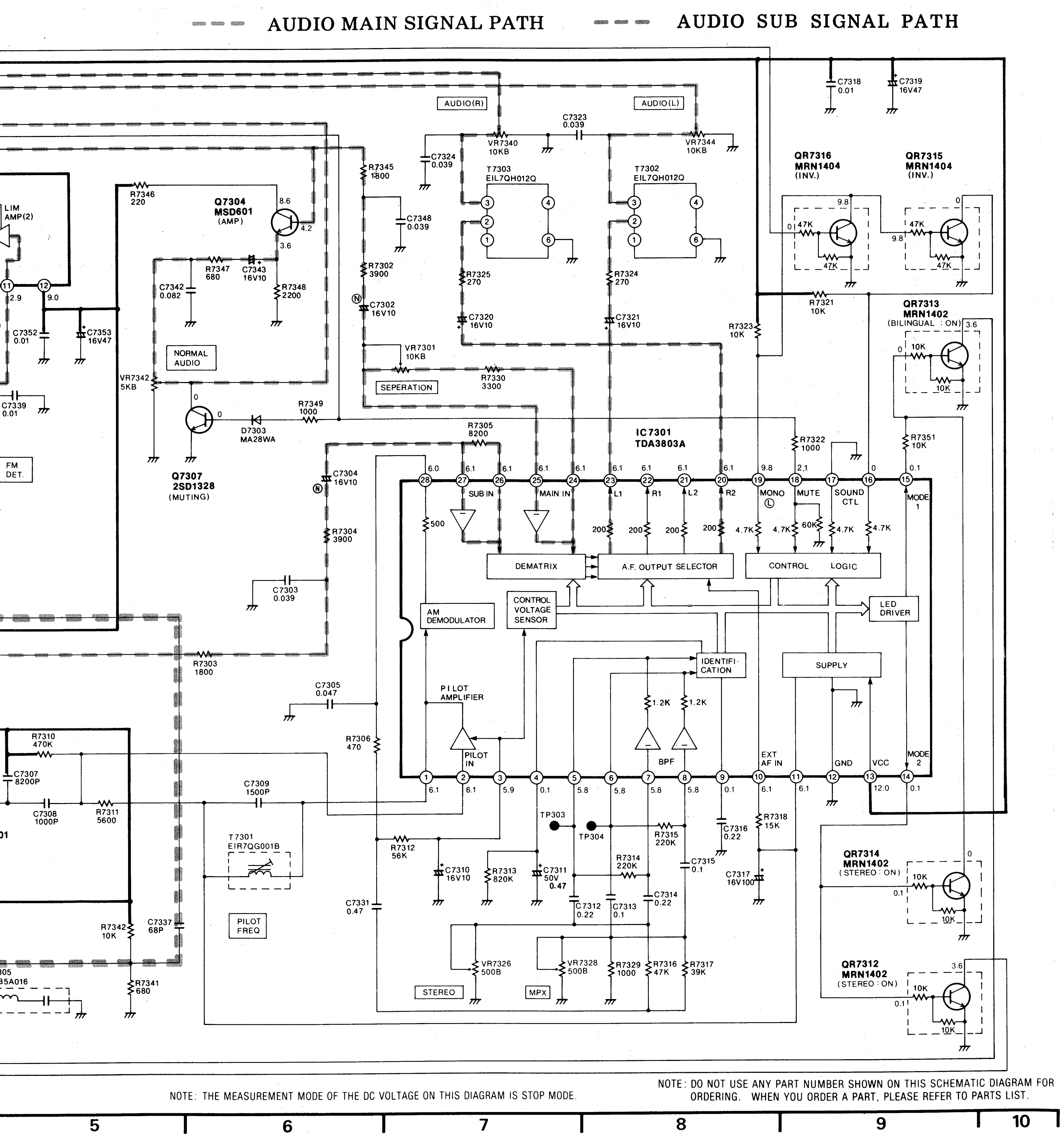
9
10

NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.


C
B
A
IC730
C7333
R7354
X7305
R7339

4-32. DECODER PACK C.B.A. (VEP07671A: AG-4700E)


AUDIO MAIN SIGNAL PATH
AUDIO SUB SIGNAL PATH
AUDIO(R)
AUDIO(L)
VR7340 10KB
VR7344 10KB
T7303 EIL7QH012Q
T7302 EIL7QH012Q
QR7316 MRN1404 (INV.)
QR7315 MRN1404 (INV.)
QR7313 MRN1402 (BILINGUAL : ON)
Q7304 MSD601 (AMP)
Q7307 2SD1328 (MUTING)
D7303 MA28WA
LIM AMP(2)
FM DET.
NORMAL AUDIO
SEPERATION
VR7301 10KB
VR7342 5KB
IC7301 TDA3803A
SUB IN
MAIN IN
MONO
MUTE
SOUND CTL
MODE 1
DEMATRIX
A.F. OUTPUT SELECTOR
CONTROL LOGIC
CONTROL VOLTAGE SENSOR
AM DEMODULATOR
LED DRIVER
IDENTIFI-CATION
SUPPLY
PILOT AMPLIFIER
PILOT IN
BPF
EXT AF IN
GND
VCC
MODE 2
T7301 EIR7QG001B
PILOT FREQ
TP303
TP304
VR7326 500B
VR7328 500B
STEREO
MPX
QR7314 MRN1402 (STEREO : ON)
QR7312 MRN1402 (STEREO : ON)
5
6
7
8
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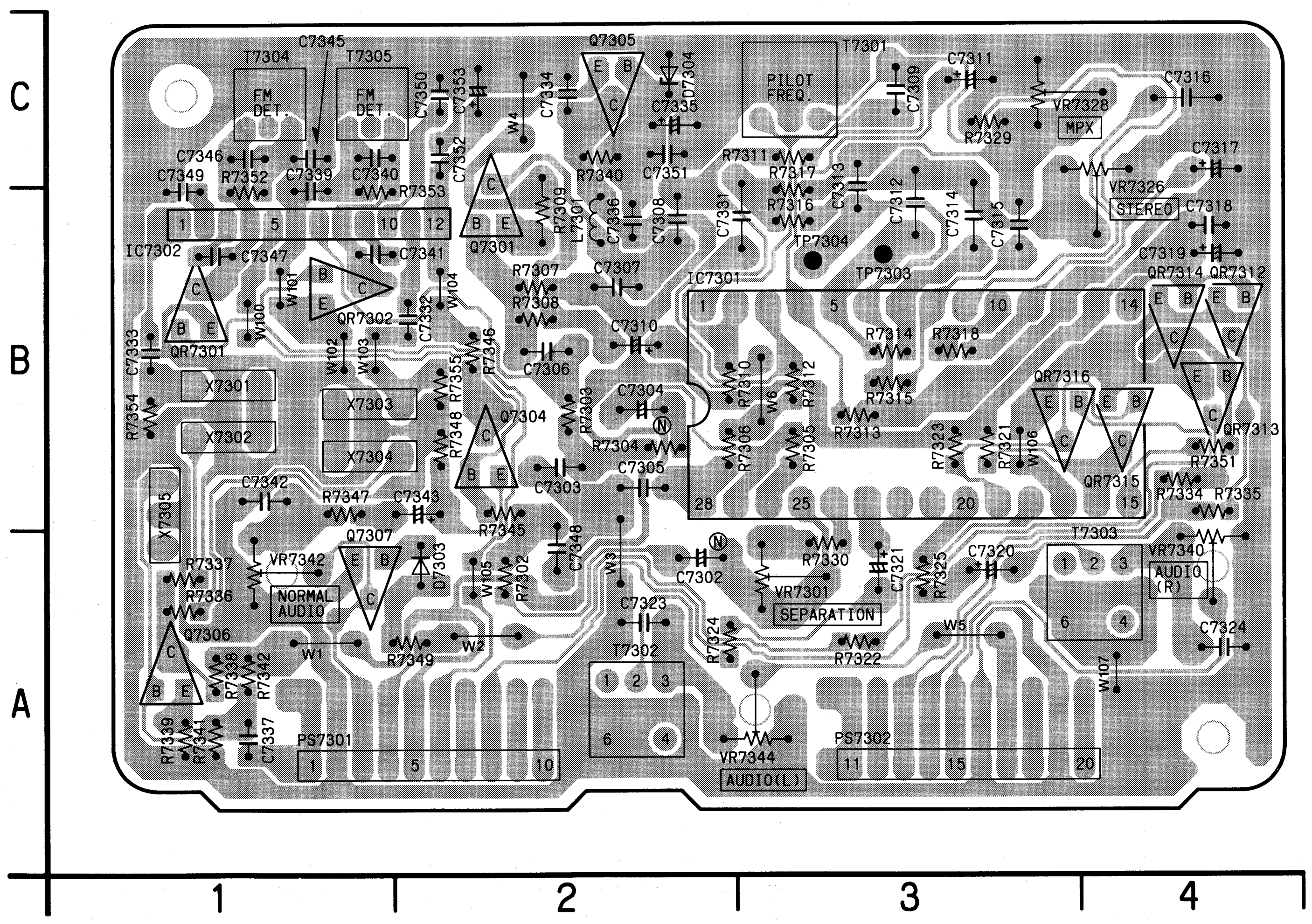
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

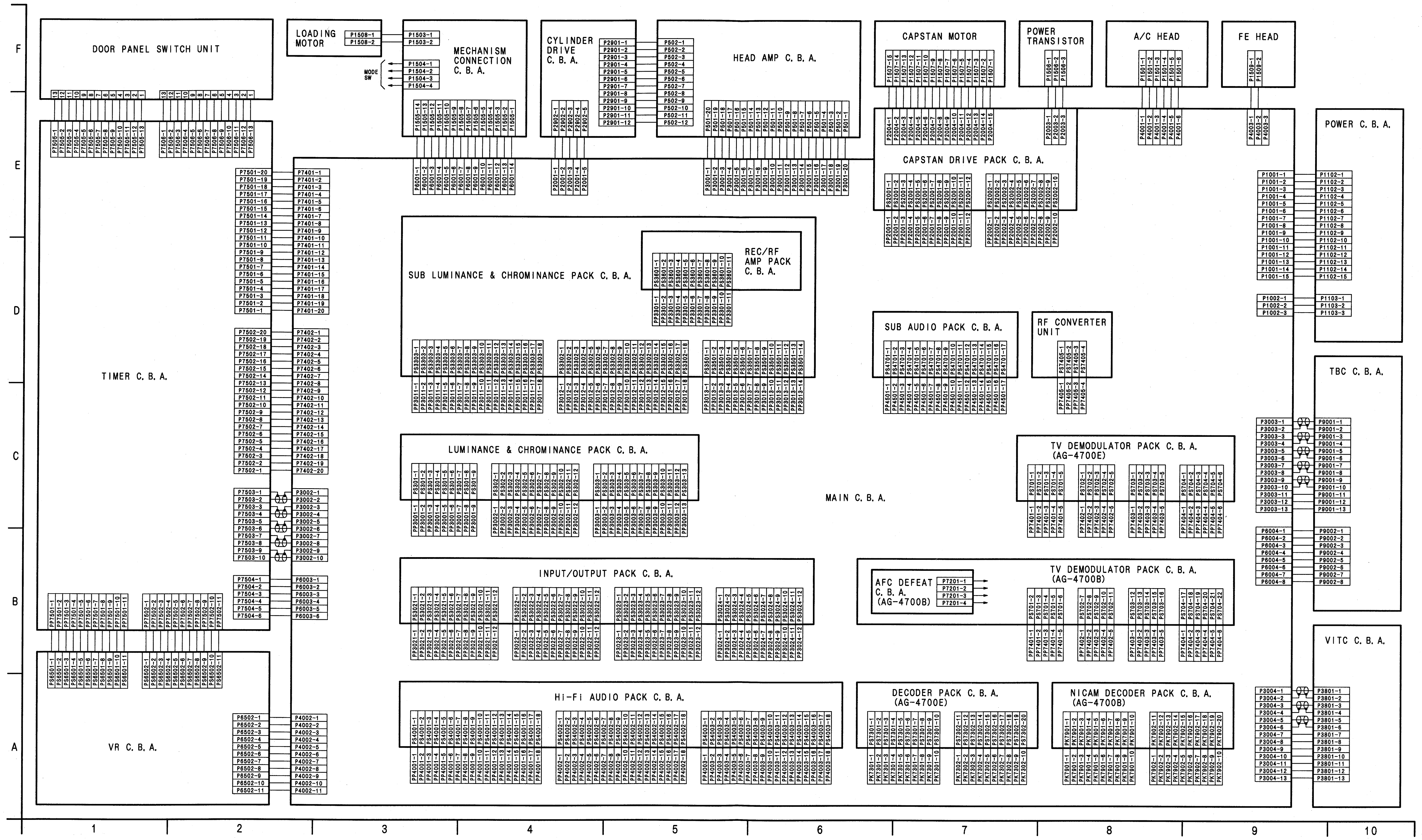
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

DECODER PACK C.B.A.			
Transistor		**Test Point**	
Q7301	B-2	TP7303	B-3
Q7304	B-2	TP7304	B-3
Q7305	C-2		
Q7306	A-1	**Adjustment**	
Q7307	A-1	T7301	C-3
Transistor & Resistor		T7302	A-2
		T7303	A-4
QR7301	B-1	T7304	C-1
QR7302	B-1	T7305	C-1
QR7312	B-4	VR7301	A-3
QR7313	B-4	VR7326	C-4
QR7314	B-4	VR7328	C-3
QR7315	B-4	VR7340	A-4
QR7316	B-3	VR7342	A-1
Integrated Circuit		VR7344	A-3
		Connector	
IC7301	B-3	PS7301	A-1
IC7302	B-1	PS7302	A-3

ADDRESS INFORMATION


C
B
A
1
2
3
4
T7304
T7305
FM DET.
PILOT FREQ.
Q7305
T7301
VR7328
MPX
VR7326
STEREO
IC7302
IC7301
Q7301
Q7304
QR7302
QR7301
X7301
X7302
X7303
X7304
X7305
TP7304
TP7303
QR7314
QR7312
QR7316
QR7313
QR7315
Q7307
Q7306
VR7342
NORMAL AUDIO
VR7301
SEPARATION
T7302
T7303
VR7340
AUDIO (R)
VR7344
AUDIO(L)
PS7301
PS7302

4-33. INTERCONNECTION SCHEMATIC DIAGRAM


DOOR PANEL SWITCH UNIT
LOADING MOTOR
MECHANISM CONNECTION C. B. A.
MODE SW
CYLINDER DRIVE C. B. A.
HEAD AMP C. B. A.
CAPSTAN MOTOR
POWER TRANSISTOR
A/C HEAD
FE HEAD
CAPSTAN DRIVE PACK C. B. A.
POWER C. B. A.
TIMER C. B. A.
SUB LUMINANCE & CHROMINANCE PACK C. B. A.
REC/RF AMP PACK C. B. A.
SUB AUDIO PACK C. B. A.
RF CONVERTER UNIT
TBC C. B. A.
LUMINANCE & CHROMINANCE PACK C. B. A.
TV DEMODULATOR PACK C. B. A. (AG-4700E)
MAIN C. B. A.
INPUT/OUTPUT PACK C. B. A.
AFC DEFEAT C. B. A. (AG-4700B)
TV DEMODULATOR PACK C. B. A. (AG-4700B)
VITC C. B. A.
VR C. B. A.
HI-Fi AUDIO PACK C. B. A.
DECODER PACK C. B. A. (AG-4700E)
NICAM DECODER PACK C. B. A. (AG-4700B)
F
E
D
C
B
A
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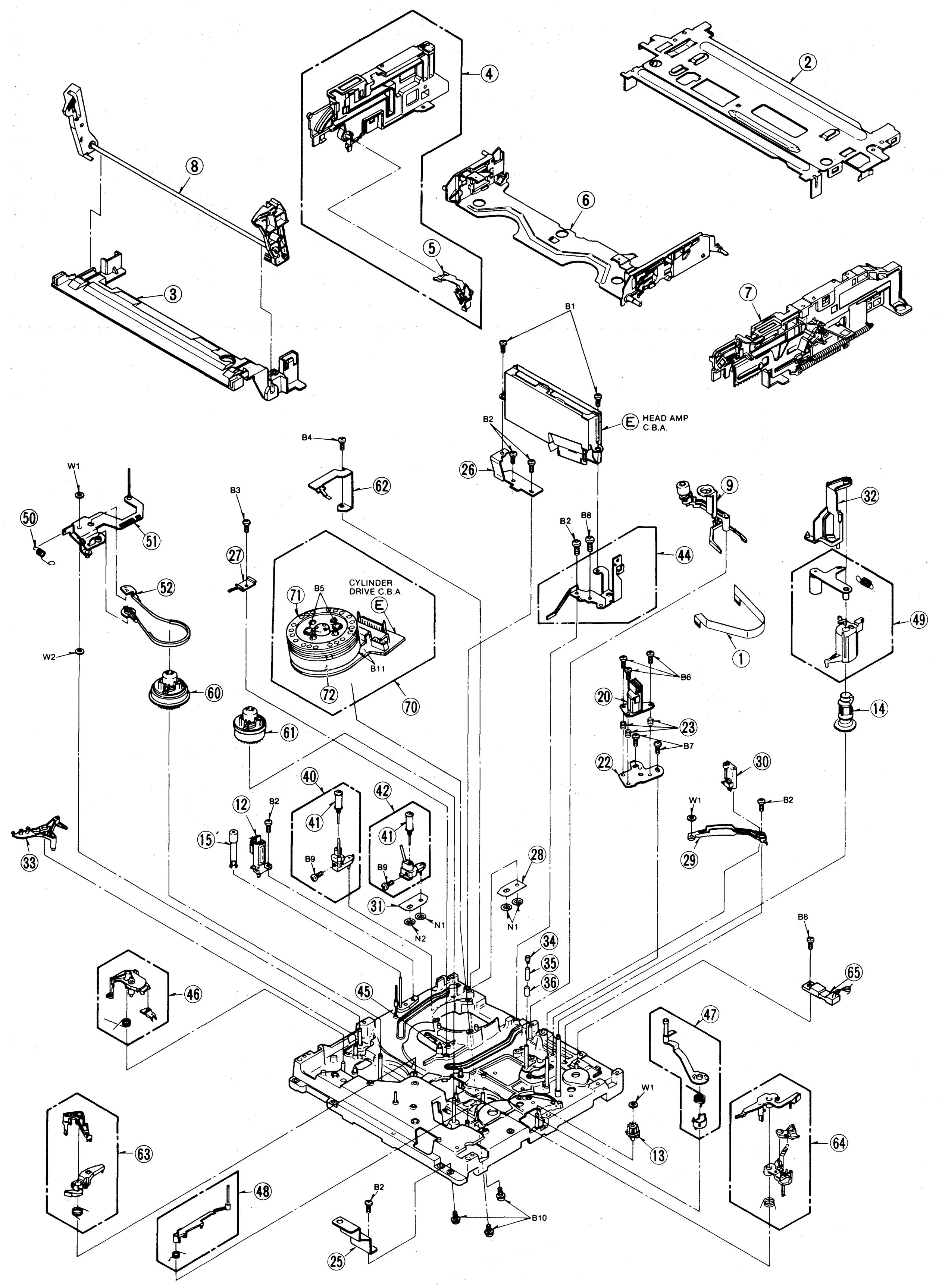
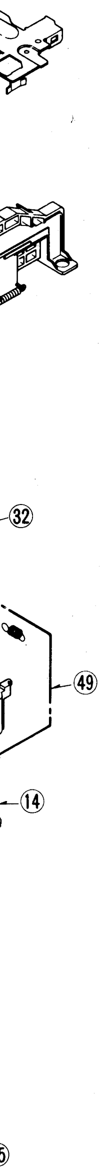
SECTION 5
EXPLODED VIEWS & PARTS LIST
5-1. EXPLODED VIEW & MECHANICAL REPLACEMENT PARTS LIST
❶ *Chassis Parts Section (1)*



Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1(1)	VWJ0617	FLEXIBLE CABLE (6P)	1	P4003-P1501
2(1)	VMA8644	TOP PLATE	1	
3(1)	VMA8787	CASSETTE GUIDE	1	
4(1)	VXA4660	SIDE PLATE (L) UNIT	1	
5(1)	VXL2250	OPENER LEVER UNIT	1	
6(1)	VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)	VXA4806	SIDE PLATE (R) UNIT	1	
8(1)	VXP1339	MAIN SHAFT UNIT	1	
9(1)	VXL2380	CLEANER ARM UNIT	1	
12(1)	VBS0050	FE HEAD	1	
13(1)	VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)	VDG0886	PINCH CAM GEAR	1	
15(1)	VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)	VED0205	A/C HEAD (1) UNIT	1	
22(1)	VMA8624	A/C HEAD BASE	1	
23(1)	VMB2515	A/C HEAD SPRING	3	
25(1)	VMA8761	MOUNT ANGLE	1	
26(1)	VMA8763	HEAD AMP MOUNT ANGLE (L)	1	
27(1)	VMC0917	EARTH SPRING	1	
28(1)	VMA8874	INCLIND BASE HOLDER (S)	1	
29(1)	VMD2078	P5 STOPPER BASE	1	
30(1)	VXA4927	P5 POST STOPPER	1	
31(1)	VMA8873	INCLIND BASE HOLDER (T)	1	
32(1)	VMD2101	OPENER PIECE	1	
33(1)	VML2776	TENSION SPRING ARM	1	
34(1)	VMX1544	P4 UPPER LIMITER	1	
35(1)	VMX2175	P4 SLEEVE	1	
36(1)	VMX2176	P4 LOWER LIMITER	1	
40(1)	VXA5245KIT	INCLINED BASE (S) UNIT	1	OR VXA4982KIT
41(1)	VXP1415	ROLLER POST	2	
42(1)	VXA5247KIT	INCLINED BASE (T) UNIT	1	OR VXA4984KIT
44(1)	VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)	VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)	VXL2310	REVIEW ARM UNIT	1	
47(1)	VXL2306	P5 ARM UNIT	1	
48(1)	VXL2243	TAKE UP TENSION REGULATOR ARM UNIT	1	
49(1)	VXL2246	PINCH ARM UNIT	1	
50(1)	VMB2434	TENSION SPRING	1	
51(1)	VXL2309	TENSION ARM (1) UNIT	1	
52(1)	VXZ0310	TENSION BAND UNIT	1	
60(1)	VXR0221	SUPPLY REEL TABLE UNIT	1	
61(1)	VXR0222	TAKE UP REEL TABLE UNIT	1	
62(1)	VXS0113	EARTH PLATE	1	
63(1)	VXZ0312	SUPPLY BRAKE ARM UNIT	1	
64(1)	VXZ0313	TAKE UP BRAKE ARM UNIT	1	
65(1)	2SW941PSW	POWER TRANSISTOR	1	
70(1)	VEG1133	CYLINDER UNIT	1	
71(1)	VEH0651	UPPER CYLINDER UNIT	1	
72(1)	VSC3940	CYLINDER SHIELD PLATE	1	
B1(1)	VHD0773	SCREW	2	
B2(1)	XTV26+6F	SCREW	6	
B3(1)	XTV26+4F	SCREW	1	
B4(1)	XTN3+6FFZ	SCREW	1	
B5(1)	VHD0553	SCREW	2	
B6(1)	VHD0762	SCREW	3	
B7(1)	XTV26+6FZ	SCREW	2	
B8(1)	XTV26+8F	SCREW	2	
B9(1)	XQN2+AJ4	SCREW	2	
B10(1)	VHD0342	SCREW	3	
B11(1)	XYNV0029	SCREW	2	
N1(1)	VHN0192	NUT	3	
N2(1)	VHN0193	NUT	1	
W1(1)	VMX2208	WASHER	3	
W2(1)	XWGV26D5G	WASHER	1	
100(2)	VEK5927	STATOR UNIT	1	
101(2)	VBK0061	FG HEAD	1	
103(2)	VMA8930	ROTOR STOPPER	1	
104(2)	VMX1927	OIL SEAL	2	
105(2)	VXD0140	HOUSING UNIT	1	
106(2)	VXP1350	ROTOR UNIT	1	
107(2)	VXQ0297	THRUST SCREW UNIT	1	
108(2)	VDG0913	MAIN CAM GEAR	1	
109(2)	VDG0956	SUPPLY REEL GEAR	1	
110(2)	VDG0957	TAKE UP REEL GEAR	1	
111(2)	VDG0868	WORM WHEEL GEAR	1	
112(2)	VDG0885	SUB CAM GEAR	1	
113(2)	VDV0235	TIMING BELT	1	
120(2)	VDG0866	WORM GEAR	1	
121(2)	VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)	VMD1942	MOTOR BRACKET	1	
124(2)	VMD2153	S-VHS SW ACTUATER	1	
126(2)	VML2725	IDLER CONTROL LEVER	1	
127(2)	VSS0365	MODE SW	1	
128(2)	VXA5138	SS BRAKE BASE UNIT	1	
129(2)	VXA4799	TENSION ROLLER UNIT	1	
140(2)	VXL2378	IDLER ARM UNIT	1	
141(2)	VXL2372	DIRECT LEVER UNIT	1	
142(2)	VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)	VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)	VXL2307	MAIN LEVER UNIT	1	
145(2)	VXP1409	CENTRE CLUTCH	1	
150(2)	VMD1926	LED HOLDER	1	
151(2)	VMD1927	PHOTO TRANSISTOR HOLDER	2	
152(2)	VES0695	SAFETY TAB SW	1	
153(2)	VJB00T87	MECHANISM CONNECTION C.B.	1	ELECTRICAL PARTS ON THE C.B.A. ARE LISTED ON ELECTRICAL PARTS LIST.
154(2)	VMD2029	REEL SHAFT GUIDE	1	
155(2)	VST0176	S-VHS CASSETTE SW	1	
156(2)	VWJ0777	FLEXIBLE CABLE (14P)	1	(P6001-P1505)
B101(2)	VHD0772	SCREW	4	
B102(2)	XTV26+8F	SCREW	1	
B103(2)	XTV26+6F	SCREW	3	
B104(2)	VHD0753	SCREW	4	
B105(2)	VHD0754	SCREW	1	
B106(2)	XSB26+4FZ	SCREW	1	
W101(2)	VMX2208	WASHER	4	

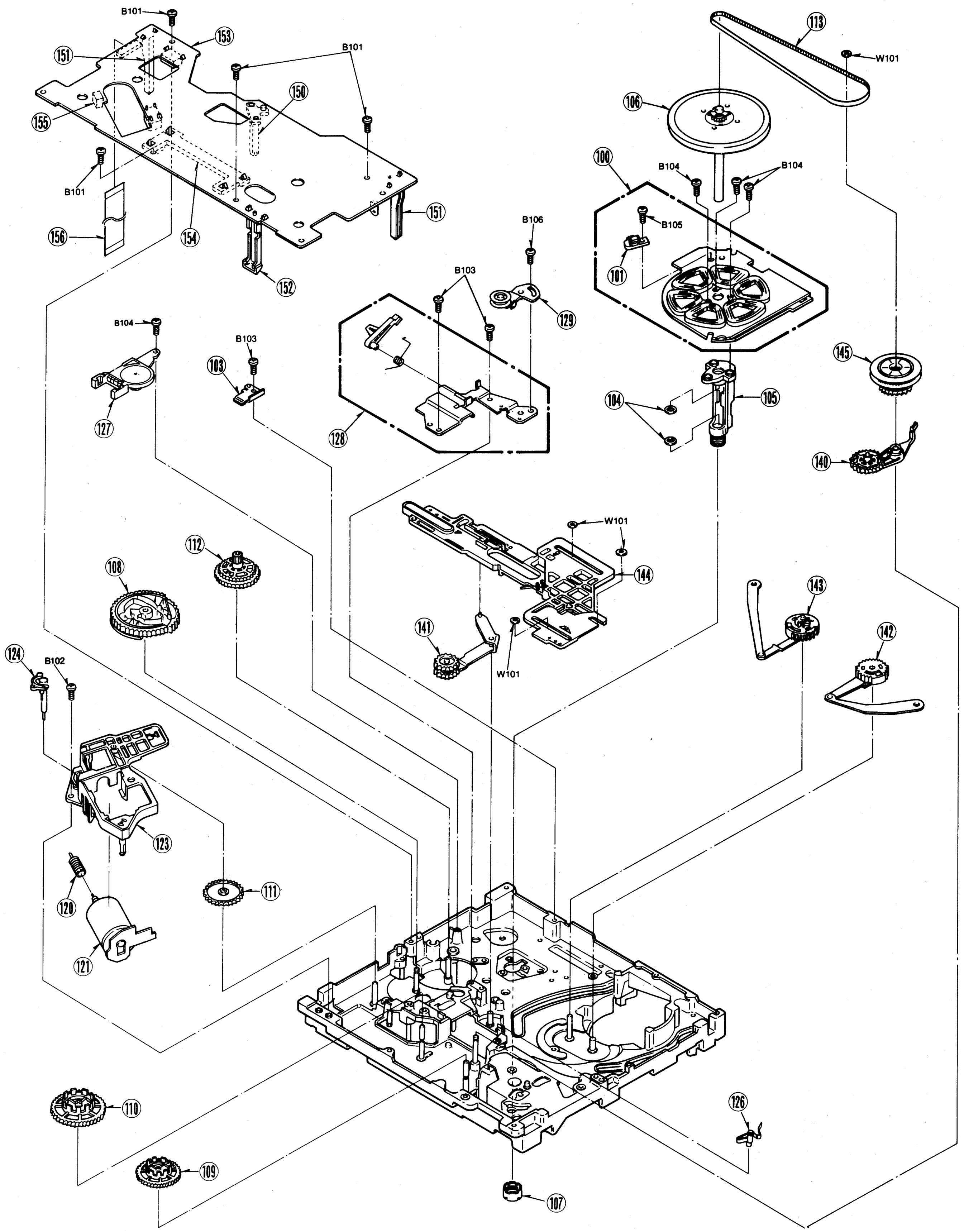
IST



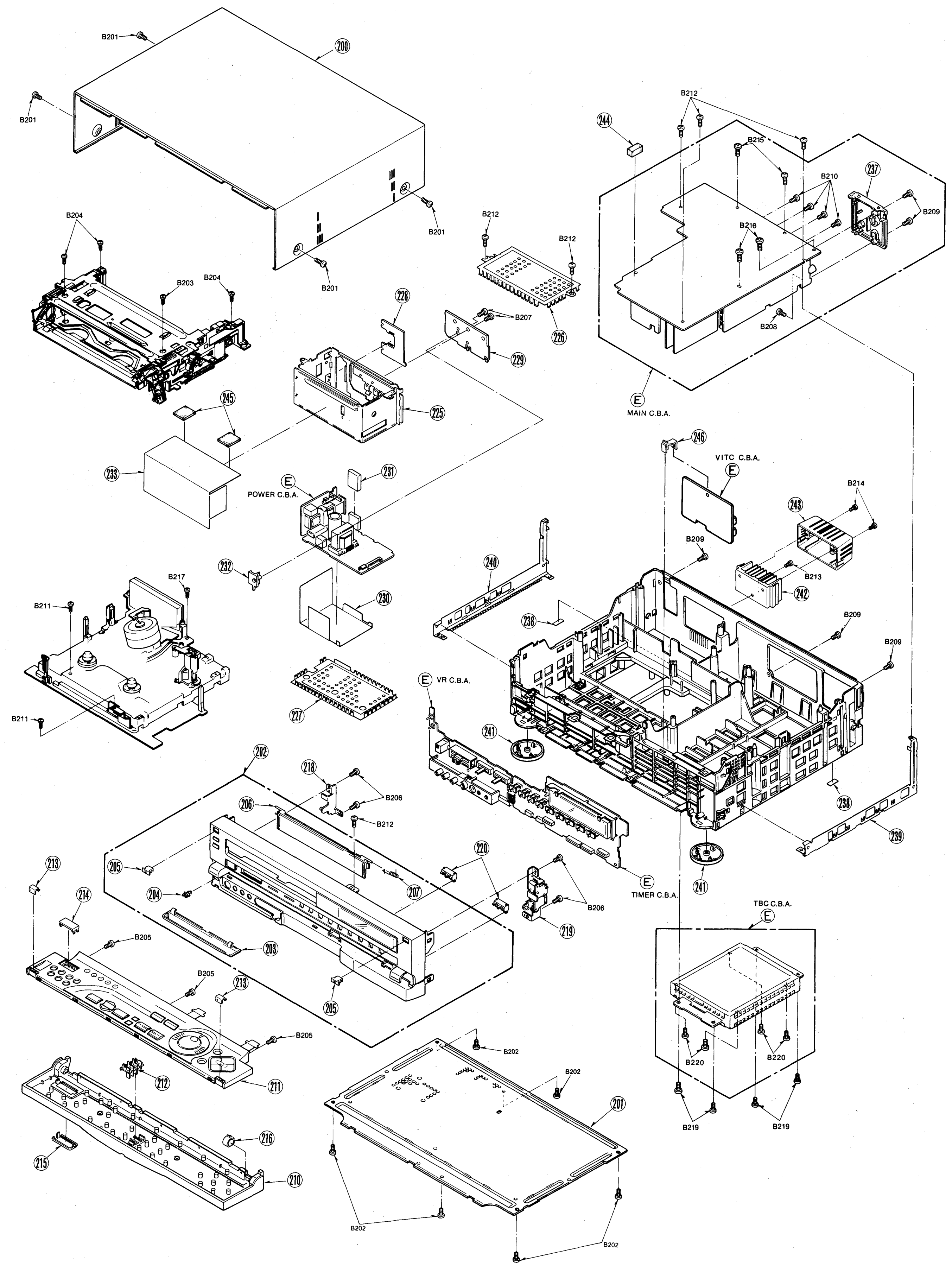
Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
1(1)		VWJ0617	FLEXIBLE CABLE (6P)	1	P4003-P1501
2(1)		VMA8644	TOP PLATE	1	
3(1)		VMA8787	CASSETTE GUIDE	1	
4(1)		VXA4660	SIDE PLATE (L) UNIT	1	
5(1)		VXL2250	OPENER LEVER UNIT	1	
6(1)		VXA4661	CASSETTE HOLDER PLATE UNIT	1	
7(1)		VXA4806	SIDE PLATE (R) UNIT	1	
8(1)		VXP1339	MAIN SHAFT UNIT	1	
9(1)		VXL2380	CLEANER ARM UNIT	1	
12(1)		VBS0050	FE HEAD	1	
13(1)		VDG0871	CARRIAGE CONNECTION GEAR	1	
14(1)		VDG0886	PINCH CAM GEAR	1	
15(1)		VXP1402	IMPEDANCE ROLLER UNIT	1	
20(1)		VED0205	A/C HEAD (1) UNIT	1	
22(1)		VMA8624	A/C HEAD BASE	1	
23(1)		VMB2515	A/C HEAD SPRING	3	
25(1)		VMA8761	MOUNT ANGLE	1	
26(1)		VMA8763	HEAD AMP MOUNT ANGLE (L)	1	
27(1)		VMC0917	EARTH SPRING	1	
28(1)		VMA8874	INCLIND BASE HOLDER (S)	1	
29(1)		VMD2078	P5 STOPPER BASE	1	
30(1)		VXA4927	P5 POST STOPPER	1	
31(1)		VMA8873	INCLIND BASE HOLDER (T)	1	
32(1)		VMD2101	OPENER PIECE	1	
33(1)		VML2776	TENSION SPRING ARM	1	
34(1)		VMX1544	P4 UPPER LIMITER	1	
35(1)		VMX2175	P4 SLEEVE	1	
36(1)		VMX2176	P4 LOWER LIMITER	1	
40(1)		VXA5245KIT	INCLINED BASE (S) UNIT	1	OR VXA4982KIT
41(1)		VXP1415	ROLLER POST	2	
42(1)		VXA5247KIT	INCLINED BASE (T) UNIT	1	OR VXA4984KIT
44(1)		VXA4974	HEAD AMP MOUNT ANGLE (R) U.	1	
45(1)		VMS5383	CASSETTE POSITION FIXTURE	1	
46(1)		VXL2310	REVIEW ARM UNIT	1	
47(1)		VXL2306	P5 ARM UNIT	1	
48(1)		VXL2243	TAKE UP TENSION REGULATOR ARM UNIT	1	
49(1)		VXL2246	PINCH ARM UNIT	1	
50(1)		VMB2434	TENSION SPRING	1	
51(1)		VXL2309	TENSION ARM (1) UNIT	1	
52(1)		VXZ0310	TENSION BAND UNIT	1	
60(1)		VXR0221	SUPPLY REEL TABLE UNIT	1	
61(1)		VXR0222	TAKE UP REEL TABLE UNIT	1	
62(1)		VXS0113	EARTH PLATE	1	
63(1)		VXZ0312	SUPPLY BRAKE ARM UNIT	1	
64(1)		VXZ0313	TAKE UP BRAKE ARM UNIT	1	
65(1)		2SW941PSW	POWER TRANSISTOR	1	
70(1)		VEG1133	CYLINDER UNIT	1	
71(1)		VEH0651	UPPER CYLINDER UNIT	1	
72(1)		VSC3940	CYLINDER SHIELD PLATE	1	
B1(1)		VHD0773	SCREW	2	
B2(1)		XTV26+6F	SCREW	6	
B3(1)		XTV26+4F	SCREW	1	
B4(1)		XTN3+6FFZ	SCREW	1	
B5(1)		VHD0553	SCREW	2	
B6(1)		VHD0762	SCREW	3	
B7(1)		XTV26+6FZ	SCREW	2	
B8(1)		XTV26+8F	SCREW	2	
B9(1)		XQN2+AJ4	SCREW	2	
B10(1)		VHD0342	SCREW	3	
B11(1)		XYNV0029	SCREW	2	
N1(1)		VHN0192	NUT	3	
N2(1)		VHN0193	NUT	1	
W1(1)		VMX2208	WASHER	3	
W2(1)		XWGV26D5G	WASHER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
100(2)		VEK5927	STATOR UNIT	1	
101(2)		VBK0061	FG HEAD	1	
103(2)		VMA8930	ROTOR STOPPER	1	
104(2)		VMX1927	OIL SEAL	2	
105(2)		VXD0140	HOUSING UNIT	1	
106(2)		VXP1350	ROTOR UNIT	1	
107(2)		VXQ0297	THRUST SCREW UNIT	1	
108(2)		VDG0913	MAIN CAM GEAR	1	
109(2)		VDG0956	SUPPLY REEL GEAR	1	
110(2)		VDG0957	TAKE UP REEL GEAR	1	
111(2)		VDG0868	WORM WHEEL GEAR	1	
112(2)		VDG0885	SUB CAM GEAR	1	
113(2)		VDV0235	TIMING BELT	1	
120(2)		VDG0866	WORM GEAR	1	
121(2)		VEM0427	LOADING MOTOR (1) UNIT	1	
123(2)		VMD1942	MOTOR BRACKET	1	
124(2)		VMD2153	S-VHS SW ACTUATER	1	
126(2)		VML2725	IDLER CONTROL LEVER	1	
127(2)		VSS0365	MODE SW	1	
128(2)		VXA5138	SS BRAKE BASE UNIT	1	
129(2)		VXA4799	TENSION ROLLER UNIT	1	
140(2)		VXL2378	IDLER ARM UNIT	1	
141(2)		VXL2372	DIRECT LEVER UNIT	1	
142(2)		VXL2299	SUPPLY LOADING ARM UNIT	1	
143(2)		VXL2300	TAKE UP LOADING ARM UNIT	1	
144(2)		VXL2307	MAIN LEVER UNIT	1	
145(2)		VXP1409	CENTRE CLUTCH	1	
150(2)		VMD1926	LED HOLDER	1	
151(2)		VMD1927	PHOTO TRANSISTOR HOLDER	2	
152(2)		VES0695	SAFETY TAB SW	1	
153(2)		VJB00T87	MECHANISM CONNECTION C.B.	1	ELECTRICAL PARTS ON THE C.B.A. ARE LISTED ON ELECTRICAL PARTS LIST.
154(2)		VMD2029	REEL SHAFT GUIDE	1	
155(2)		VST0176	S-VHS CASSETTE SW	1	
156(2)		VWJ0777	FLEXIBLE CABLE (14P)	1	(P6001-P1505)
B101(2)		VHD0772	SCREW	4	
B102(2)		XTV26+8F	SCREW	1	
B103(2)		XTV26+6F	SCREW	3	
B104(2)		VHD0753	SCREW	4	
B105(2)		VHD0754	SCREW	1	
B106(2)		XSB26+4FZ	SCREW	1	
W101(2)		VMX2208	WASHER	4	

❷ Chassis Parts Section (2)



❸ Casing Parts Section


B201
200
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B204
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B212
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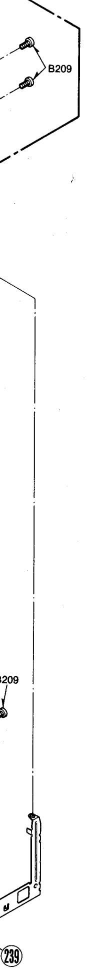
B208
244
228
B207
229
226
225
245
233
E
MAIN C.B.A.
E
POWER C.B.A.
231
246
VITC C.B.A.
E
B214
243
B209
B213
242
232
230
B217
B211
B211
240
238
B209
B209
227
E
VR C.B.A.
241
239
238
202
218
B206
B212
206
205
207
220
B206
219
E
TIMER C.B.A.
241
213
214
204
B205
203
B205
213
205
B205
212
211
216
215
210
201
B202
B202
B202
B202
TBC C.B.A.
E
B220
B220
B219
B219

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
200(3)	VGM1126	TOP PANEL	1	
201(3)	VKU0387	BOTTOM PLATE	1	
202(3)	VYP5771	FRONT PANEL (1) UNIT	1	AG-4700E
202(3)	VYP5772	FRONT PANEL (1) UNIT	1	AG-4700B
203(3)	VYF2145	SUB DOOR UNIT	1	AG-4700E
203(3)	VYF2149	SUB DOOR UNIT	1	AG-4700B
204(3)	VGQ0550	DOOR LOCK PIECE	1	
205(3)	VGQ2216	DOOR MAGNET	2	
206(3)	VKF2118	BLINDER PANEL	1	
207(3)	VMB2521	BLINDER SPRING	1	
210(3)	VYC0652	DOOR PANEL (1) UNIT	1	
211(3)	ESU19555G	DOOR PANEL SW UNIT	1	AG-4700E
211(3)	ESU19555J	DOOR PANEL SW UNIT	1	AG-4700B
212(3)	VGL0578	DOOR PANEL LIGHT	1	
213(3)	VMP4182	MAGNET ANGLE	2	
214(3)	VKW1333	IR WINDOW (INSIDE)	1	
215(3)	VKW1827	IR WINDOW (OUTSIDE)	1	
216(3)	VDG0954	DOOR GEAR	1	
218(3)	VXA5132	DOOR ANGLE (L) UNIT	1	
219(3)	VXA5130	DOOR ANGLE (R) UNIT	1	
220(3)	VGQ2807	FLEXIBLE CABLE HOLDER	2	
225(3)	VXA5129	POWER SHIELD PLATE (MAIN)U.	1	
226(3)	VSC2621	POWER SHIELD PLATE (TOP)	1	
227(3)	VSC2622	POWER SHIELD PLATE (BOTTOM)	1	
228(3)	VMP4183	INLET ANGLE	1	
229(3)	VSC3938	HEAT SINK (P)	1	
230(3)	VMZ2207	POWER BARRIER	1	<!>
231(3)	VMZ2208	INSULATION CAP	1	<!>
232(3)	VGQ3401	IC HOLDER	1	
233(3)	VMZ2257	SHIELD BARRIER	1	
237(3)	VJH0683	RF ANT TERMINAL PLATE	1	
238(3)	VKA0122	FOOT	2	
239(3)	VMP4448	SIDE ANGLE (R)	1	
240(3)	VMP4449	SIDE ANGLE (L)	1	
241(3)	VKA0165	LEG	2	
242(3)	VSC2623	HEAT SINK (O)	1	
243(3)	VKF1150	HEAT SINK COVER	1	
244(3)	VMT0199	C.B.A. SPACER	1	
245(3)	VMT0547	POWER CUSHION	2	
246(3)	VGQ1362	VITC HOLDER	1	
B201(3)	XTW3+10TFZ	SCREW	4	
B202(3)	VHD0059	SCREW	8	
B203(3)	XTV26+10F	SCREW	1	
B204(3)	XTV26+8FR	SCREW	3	
B205(3)	XTN26+8GFZ	SCREW	3	
B206(3)	XTV3+8G	SCREW	4	
B207(3)	XTS3+8J	SCREW	2	
B208(3)	XTV3+6F	SCREW	1	
B209(3)	XTV3+12JFZ	SCREW	5	
B210(3)	XTV3+8GFZ	SCREW	4	
B211(3)	VHD0168	SCREW	2	
B212(3)	VHD0773	SCREW	6	
B213(3)	XYC3+FF12FR	SCREW	1	
B214(3)	XTV3+14FZ	SCREW	2	
B215(3)	XTV3+10J	SCREW	2	
B216(3)	XTV3+8J	SCREW	2	
B217(3)	VHD0839	SCREW	1	
B219(3)	XTV3+10GR	SCREW	4	
B220(3)	XTN3+6F	SCREW	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
300(4)	VQT6023	OPERATING INSTRUCTIONS	1	<!>AG-4700E
		(ENGLISH/GERMAN)		
300(4)	VQT6024	OPERATING INSTRUCTIONS	1	<!>AG-4700E
		(FRENCH/ITALIAN)		
300(4)	VQT6025	OPERATING INSTRUCTIONS	1	<!>AG-4700E
		(SPANISH)		
300(4)	VQT6026	OPERATING INSTRUCTIONS	1	<!>AG-4700B
		(ENGLISH)		
304(4)	VJA0665	AC CORD	1	<!>AG-4700E
304(4)	VJA0733	AC CORD	1	<!>AG-4700B
305(4)	VJA0787	EDIT 5P CABLE	1	
308(4)	VEQ1681	REMOTE CONTROLLER	1	
312(4)	VPK0834	ACCESSORIES PACKING	1	
314(4)	VPN3779	UPPER PAD	1	
315(4)	VPN3763	CUSHION (R)	1	
316(4)	VPN3764	CUSHION (L)	1	
317(4)	VPG7853	PACKING	1	AG-4700E
317(4)	VPG7854	PACKING	1	AG-4700B
318(4)	VFA0151	AV ADAPTOR (IN)	1	
319(4)	VFA0163	AV ADAPTOR (OUT)	1	
		SERVICE FIXTURES & TOOLS		
	VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
	VFK0335	RETAINING RING REMOVER	1	
		(3mm/4mm)		
	VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
	VFK0326	HEX WRENCH SET	1	
	VFK0132	BACK TENSION METER	1	
	VFK27	HEAD CLEANING STICK	1	
	MOR265	MORLYTONE GREASE	1	
	VFK0341	UPPER CYLINDER REMOVER	1	
	VFK0680	WHITE GREASE	1	
	VFK0851	CENTRE FIXING TOOL	1	
	VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	
	VFK0678	18P EXTENSION CABLE	2	
	VFK0764	10P EXTENSION CABLE	1	
	VFK0918	17P EXTENSION CABLE	1	
	VFK0937	9P EXTENSION CABLE	1	
	VFK0938	12P EXTENSION CABLE	2	
	VFK0939	13P EXTENSION CABLE	1	
	VFK0940	14P EXTENSION CABLE	1	

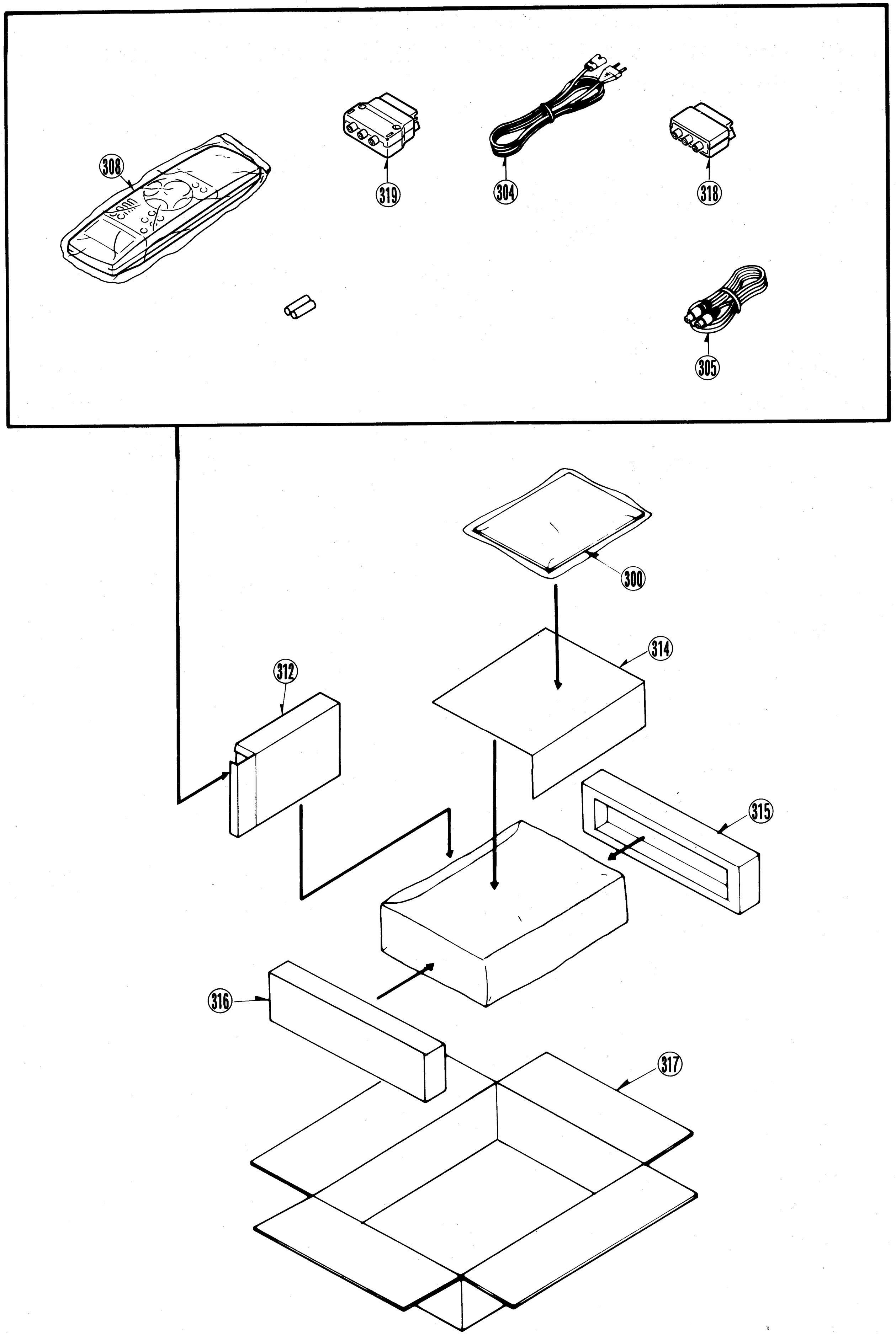
❹ Pac



Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
200(3)	VGM1126	TOP PANEL	1	
201(3)	VKU0387	BOTTOM PLATE	1	
202(3)	VYP5771	FRONT PANEL (1) UNIT	1	AG-4700E
202(3)	VYP5772	FRONT PANEL (1) UNIT	1	AG-4700B
203(3)	VYF2145	SUB DOOR UNIT	1	AG-4700E
203(3)	VYF2149	SUB DOOR UNIT	1	AG-4700B
204(3)	VGQ0550	DOOR LOCK PIECE	1	
205(3)	VGQ2216	DOOR MAGNET	2	
206(3)	VKF2118	BLINDER PANEL	1	
207(3)	VMB2521	BLINDER SPRING	1	
210(3)	VYC0652	DOOR PANEL (1) UNIT	1	
211(3)	ESU19555G	DOOR PANEL SW UNIT	1	AG-4700E
211(3)	ESU19555J	DOOR PANEL SW UNIT	1	AG-4700B
212(3)	VGL0578	DOOR PANEL LIGHT	1	
213(3)	VMP4182	MAGNET ANGLE	2	
214(3)	VKW1333	IR WINDOW (INSIDE)	1	
215(3)	VKW1827	IR WINDOW (OUTSIDE)	1	
216(3)	VDG0954	DOOR GEAR	1	
218(3)	VXA5132	DOOR ANGLE (L) UNIT	1	
219(3)	VXA5130	DOOR ANGLE (R) UNIT	1	
220(3)	VGQ2807	FLEXIBLE CABLE HOLDER	2	
225(3)	VXA5129	POWER SHIELD PLATE (MAIN)U.	1	
226(3)	VSC2621	POWER SHIELD PLATE (TOP)	1	
227(3)	VSC2622	POWER SHIELD PLATE (BOTTOM)	1	
228(3)	VMP4183	INLET ANGLE	1	
229(3)	VSC3938	HEAT SINK (P)	1	
230(3)	VMZ2207	POWER BARRIER	1	<!>
231(3)	VMZ2208	INSULATION CAP	1	<!>
232(3)	VGQ3401	IC HOLDER	1	
233(3)	VMZ2257	SHIELD BARRIER	1	
237(3)	VJH0683	RF ANT TERMINAL PLATE	1	
238(3)	VKA0122	FOOT	2	
239(3)	VMP4448	SIDE ANGLE (R)	1	
240(3)	VMP4449	SIDE ANGLE (L)	1	
241(3)	VKA0165	LEG	2	
242(3)	VSC2623	HEAT SINK (O)	1	
243(3)	VKF1150	HEAT SINK COVER	1	
244(3)	VMT0199	C.B.A. SPACER	1	
245(3)	VMT0547	POWER CUSHION	2	
246(3)	VGQ1362	VITC HOLDER	1	
B201(3)	XTW3+10TFZ	SCREW	4	
B202(3)	VHD0059	SCREW	8	
B203(3)	XTV26+10F	SCREW	1	
B204(3)	XTV26+8FR	SCREW	3	
B205(3)	XTN26+8GFZ	SCREW	3	
B206(3)	XTV3+8G	SCREW	4	
B207(3)	XTS3+8J	SCREW	2	
B208(3)	XTV3+6F	SCREW	1	
B209(3)	XTV3+12JFZ	SCREW	5	
B210(3)	XTV3+8GFZ	SCREW	4	
B211(3)	VHD0168	SCREW	2	
B212(3)	VHD0773	SCREW	6	
B213(3)	XYC3+FF12FR	SCREW	1	
B214(3)	XTV3+14FZ	SCREW	2	
B215(3)	XTV3+10J	SCREW	2	
B216(3)	XTV3+8J	SCREW	2	
B217(3)	VHD0839	SCREW	1	
B219(3)	XTV3+10GR	SCREW	4	
B220(3)	XTN3+6F	SCREW	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
300(4)	VQT6023	OPERATING INSTRUCTIONS	1	<!>AG-4700E
		(ENGLISH/GERMAN)		
300(4)	VQT6024	OPERATING INSTRUCTIONS	1	<!>AG-4700E
		(FRENCH/ITALIAN)		
300(4)	VQT6025	OPERATING INSTRUCTIONS	1	<!>AG-4700E
		(SPANISH)		
300(4)	VQT6026	OPERATING INSTRUCTIONS	1	<!>AG-4700B
		(ENGLISH)		
304(4)	VJA0665	AC CORD	1	<!>AG-4700E
304(4)	VJA0733	AC CORD	1	<!>AG-4700B
305(4)	VJA0787	EDIT 5P CABLE	1	
308(4)	VEQ1681	REMOTE CONTROLLER	1	
312(4)	VPK0834	ACCESSORIES PACKING	1	
314(4)	VPN3779	UPPER PAD	1	
315(4)	VPN3763	CUSHION (R)	1	
316(4)	VPN3764	CUSHION (L)	1	
317(4)	VPG7853	PACKING	1	AG-4700E
317(4)	VPG7854	PACKING	1	AG-4700B
318(4)	VFA0151	AV ADAPTOR (IN)	1	
319(4)	VFA0163	AV ADAPTOR (OUT)	1	
		SERVICE FIXTURES & TOOLS		
	VFJ8125H3F	VHS ALIGNMENT TAPE(PAL)	1	
	VFK0335	RETAINING RING REMOVER	1	
		(3mm/4mm)		
	VFK0329	POST ADJUSTMENT SCREWDRIVER	1	
	VFK0326	HEX WRENCH SET	1	
	VFK0132	BACK TENSION METER	1	
	VFK27	HEAD CLEANING STICK	1	
	MOR265	MORLYTONE GREASE	1	
	VFK0341	UPPER CYLINDER REMOVER	1	
	VFK0680	WHITE GREASE	1	
	VFK0851	CENTRE FIXING TOOL	1	
	VFK0330	FINE ADJUSTMENT GEAR DRIVER	1	
	VFK0678	18P EXTENSION CABLE	2	
	VFK0764	10P EXTENSION CABLE	1	
	VFK0918	17P EXTENSION CABLE	1	
	VFK0937	9P EXTENSION CABLE	1	
	VFK0938	12P EXTENSION CABLE	2	
	VFK0939	13P EXTENSION CABLE	1	
	VFK0940	14P EXTENSION CABLE	1	

❹ *Packing Parts Section*



5-2. ELECTRICAL REPLACEMENT PARTS LIST

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP03A37S	P.C.BOARD W/COMPONENT	1	(RTL)<R>AG-4700E
			MAIN		
		VEP07749A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			TV DEMODULATOR		FOR VEP03A37S
		VEP02412B	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			CAP DRIVE		FOR VEP03A37S
		VEP03A61A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			Y/C		FOR VEP03A37S
		VEP03A62A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			SUB Y/C		FOR VEP03A37S
		VEP03A90A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			REC/RF		FOR VEP03A37S
		VEP03A72A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			INPUT/OUTPUT		FOR VEP03A37S
		VEP04417B	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			SUB AUDIO		FOR VEP03A37S
		VEP04447E	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			FM AUDIO		FOR VEP03A37S
		VEP07671A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			DECORDER		FOR VEP03A37S
		VEP03A37T	P.C.BOARD W/COMPONENT	1	(RTL)<R>AG-4700B
			MAIN		
		VEP07680K	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			TV DEMODULATOR		FOR VEP03A37T
		VEP02412B	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			CAP DRIVE		FOR VEP03A37T
		VEP03A61E	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			Y/C		FOR VEP03A37T
		VEP03A62C	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			SUB Y/C		FOR VEP03A37T
		VEP03A90A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			REC/RF		FOR VEP03A37T
		VEP03A72D	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			INPUT/OUTPUT		FOR VEP03A37T
		VEP04417C	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			SUB AUDIO		FOR VEP03A37T
		VEP04447E	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			FM AUDIO		FOR VEP03A37T
		VEP07675A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			DECORDER		FOR VEP03A37T
		VEP03A53A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			TBC		
		VEP03A63A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			VITC		
		VEP05176G	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			HEAD AMP		
		VEP06926C	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			VR		
		VEP07739G	P.C.BOARD W/COMPONENT	1	(RTL)<R>AG-4700E
			TIMER		
		VEP07739Q	P.C.BOARD W/COMPONENT	1	(RTL)<R>AG-4700B
			TIMER		
		VEP01558C	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			POWER		
		VEP00T87A	P.C.BOARD W/COMPONENT	1	(RTL)<R>
			MECHANISM CONNECTION		
F1101		XBA2C16TH15	FUSE	1	<!>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEP03A37S	P.C.BOARD W/COMPONENT		AG-4700E
			MAIN		
		VEP07749A	P.C.BOARD W/COMPONENT		ON VEP03A37S
			TV DEMODULATOR		
		VEP02412B	P.C.BOARD W/COMPONENT		ON VEP03A37S
			CAP DRIVE		
		VEP03A61A	P.C.BOARD W/COMPONENT		ON VEP03A37S
			Y/C		
		VEP03A62A	P.C.BOARD W/COMPONENT		ON VEP03A37S
			SUB Y/C		
		VEP03A90A	P.C.BOARD W/COMPONENT		ON VEP03A37S
			REC/RF		
		VEP03A72A	P.C.BOARD W/COMPONENT		ON VEP03A37S
			INPUT/OUTPUT		
		VEP04417B	P.C.BOARD W/COMPONENT		ON VEP03A37S
			SUB AUDIO		
		VEP04447E	P.C.BOARD W/COMPONENT		ON VEP03A37S
			FM AUDIO		
		VEP07671A	P.C.BOARD W/COMPONENT		ON VEP03A37S
			DECORDER		
			CAPACITORS		
C301		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C303		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C305		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C306		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C307		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C308		ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C309		ECUM1H562KBN	C.CAPACITOR CH 50V 5600P	1	
C310		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C311		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C312		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C313		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C314		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C315,16		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C317		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C318		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C319		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C321,22		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	2	
C324		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C325,26		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C329		ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C331		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C332,33		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C334		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C335		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C336		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C337		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C338		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C339		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C340		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C341		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C342		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C343		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C344		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C345,46		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C348		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C349		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C350		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C701		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	1	
C702		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C703		ECEA1HK2R2	E.CAPACITOR 50V 2.2U	1	
C707		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	1	
C708		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C717-20		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C721		ECEA1HKR27K	E.CAPACITOR 50V 0.27U	1	
C722		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C725		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	

Ref.No.		Part No.	Part.Name & Description	Pcs	Remarks
C727		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C728		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731		ECEA1CKS100	E.CAPACITOR 16V 10U	1	
C734		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C739		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C740		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C742		ECUM1H030CCN	C.CAPACITOR CH 50V 3P	1	
C743		ECUM1H270RSN	C.CAPACITOR CH 50V 27P	1	
C744		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C745		ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C746		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C748		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C782		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C790		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C797,98		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C801		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C802		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C803		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C804		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C805,06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C808		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C809		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C810		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C811-13		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C814		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C815		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C816		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C817		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C818		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C819		ECWM1H332JZ	F.CAPACITOR 50V 3300P	1	
C820		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C821-23		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C824		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C825-27		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C828,29		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	2	
C830		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C831		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C832		ECQV1H154JM	P.CAPACITOR 50V 0.15U	1	
C833		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C834		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C835		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C836		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C2001		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2003		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2005		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2006		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C2007		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2009		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2501-04		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C2505		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2506		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2507		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2508-10		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	3	
C2511-14		VCUM1H333KBN	C.CAPACITOR 50V 0.033U	4	
C2515		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2516		ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C2517		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2518		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2519,20		VCUM1H333KBN	C.CAPACITOR 50V 0.033U	2	
C2521		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2522		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2523		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2524,25		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C2526		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2527		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2528		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2529		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C2530		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2531		ECUM1E224ZFN	C.CAPACITOR CH 25V 0.22U	1	
C2532		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2533		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C2534,35		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3001		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C3002		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3003-06		ECEA1HKA010	E.CAPACITOR 50V 1U	4	
C3007,08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3009		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3010		ECA1AM331	E.CAPACITOR 10V 330U	1	
C3011		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3012		ECA1AM331	E.CAPACITOR 10V 330U	1	
C3013		ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C3014		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3016		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3017-19		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C3022		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3023,24		ECEA1AKA330	E.CAPACITOR 10V 33U	2	
C3027,28		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3029		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3030		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3031		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3032		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3033		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3301		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3302		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3304-08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3309		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3310		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3312-14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3321		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3322		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3323		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3324		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3325		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3326		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3327,28		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3329		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3330		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3336		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3338		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3339		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3340		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3341		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3342		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3343		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3344		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3345		ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
C3346		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3347		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3351,52		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	2	
C3353		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3354		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3372		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3401		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3402		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3403-07		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3408,09		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3421		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3422		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3423		ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C3424		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3425		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3426		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3427		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3428		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3429		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3430		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C3431		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3443		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3444		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3445		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3447		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3448		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3449		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3450,51		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3452		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3472		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3473		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3474		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3475-77		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3501		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3502		ECRHA030E54	TRIMMER CAPACITOR	1	
C3503		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3504		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C3505		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3506		ECWM1H682JZ	F.CAPACITOR 50V 6800P	1	
C3507		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3508		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3509		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C3510		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3511		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3512		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3513		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3514,15		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3516,17		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C3518		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C3519		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3520		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C3521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3522		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C3523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3524		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3525-27		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3528		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3529		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3530		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3531		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3532		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3533		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3534		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3601		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3602		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3603		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3604		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3605		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3606		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3607		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3608		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3609		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C3610		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3611		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3613		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3614		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3901-05		ECEA1CKA100	E.CAPACITOR 16V 10U	5	
C3906		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3907		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3908		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3909,10		ECA1AM471	E.CAPACITOR 10V 470U	2	
C3911		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C3912		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3913		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3914		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C3915		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3916		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3917		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3918		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3919		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3922		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3923		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3924		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3927		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4001,02		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4003,04		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C4005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4006		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4007		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4008		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4009		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4010		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4011,12		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	2	
C4501		ECWM1H152JZ	F.CAPACITOR 50V 1500P	1	
C4502		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CU470	E.CAPACITOR 16V 47U	2	
C4506		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4514		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4515		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4521		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4522		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4528		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4530		ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1CU330	E.CAPACITOR 16V 33U	1	
C4537		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4545		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C4551		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4552		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4556		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4562		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4563		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4564		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4565		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4572		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CU330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4593		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4594,95		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4596		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4597		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4598		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4611		ECWM1H182JZ	F.CAPACITOR 50V 1800P	1	
C4613		ECUX1H821JCV	C.CAPACITOR CH 50V 820P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECWM1H822JZ	F.CAPACITOR 50V 8200P	1	
C4621		ECEA0JU101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	
C4636		ECUX1H471JV	C.CAPACITOR CH 50V 470P	1	
C4638		ECWM1H822JZ	F.CAPACITOR 50V 8200P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4701		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4702		ECQP1222JZ	P.CAPACITOR 100V 2200P	1	
C4703		ECQB1H102JF	P.CAPACITOR 50V 1000P	1	
C4704		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4705		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4706		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C4707		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4708		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4709		ECQB1H472JF	P.CAPACITOR 50V 4700P	1	
C4710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4711,12		ECEA1AKA220	E.CAPACITOR 10V 22U	2	
C4713		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C4714		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C4901,02		ECWM1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4903,04		ECWM1H332JZ	F.CAPACITOR 50V 3300P	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4905,06		VCEA1CAD100	E.CAPACITOR 16V 10U	2	
C4907,08		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4909,10		ECWM1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4911,12		ECWM1H332JZ	F.CAPACITOR 50V 3300P	2	
C4913,14		VCEA1CAD100	E.CAPACITOR 16V 10U	2	
C4915,16		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4917,18		ECWM1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4919,20		ECWM1H332JZ	F.CAPACITOR 50V 3300P	2	
C4923,24		VCEA0JAC101	E.CAPACITOR 6.3V 100U	2	
C6001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6002		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C6003		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6004		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6005		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6006		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6007,08		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C6010		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6011		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6012		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6013		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6014		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C6015		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6016,17		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C6018		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6019		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6020		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6021		ECEA16M10	E.CAPACITOR 16V 1U	1	
C6022		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C6023		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6024		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C6025		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6026		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6027		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6028		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C6029		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6030		EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C6034		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6035		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C6036		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C6037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6038		ECEA1AKA470	E.CAPACITOR 10V 47U	1	
C6040		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6041		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C6042		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6043		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6045		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6046		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6049		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C6050,51		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C6053-56		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C6062		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C6063		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7302		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7303		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7304		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7305		ECQV1H473JZ	P.CAPACITOR 50V 0.047U	1	
C7306		ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7307		ECQB1H822KZ	P.CAPACITOR 50V 8200P	1	
C7308		ECQB1H102KZ	P.CAPACITOR 50V 1000P	1	
C7309		ECQB1H152JH	P.CAPACITOR 50V 1500P	1	
C7310		ECEA16M10	E.CAPACITOR 16V 1U	1	
C7311		ECEA50MR47	E.CAPACITOR 50V 0.47U	1	
C7312		ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7313		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7314		ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7315		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7316		ECQV1H224JM	P.CAPACITOR 50V 0.22U	1	
C7317		ECEA1CK101	E.CAPACITOR 16V 100U	1	
C7318		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7319		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7320,21		ECEA1CK100	E.CAPACITOR 16V 10U	2	
C7323,24		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	2	
C7331		ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C7332,33		ECUM1H102ZFN	C.CAPACITOR CH 50V 1000P	2	
C7334		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7335		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7336		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7337		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C7339		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7340		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7341		ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7342		ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C7343		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7345		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7346		ECUM1H390JPN	C.CAPACITOR CH 50V 39P	1	
C7347		ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1	
C7348		ECQV1H393JZ	P.CAPACITOR 50V 0.039U	1	
C7349,50		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	2	
C7351,52		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7353		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7401		ECA1CM471	E.CAPACITOR 16V 470U	1	
C7402,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7404		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7405,06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7407,08		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7409		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7410		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7651		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7652		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C7653		ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C7654		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7655		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C7668		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7685		ECEA1HK010	E.CAPACITOR 50V 1U	1	
D301		1SS283	DIODE	1	<R>
D303		MA151WK	DIODE	1	<R>
D305		1SS254	DIODE	1	<R>
D306		MA723VT	DIODE	1	<R>
D307		1SS254	DIODE	1	<R>
D308,09		MA151WK	DIODE	2	<R>
D710		MA3100L	DIODE	1	<R>
D801-07		1SS254	DIODE	7	<R>
D808		MA151WK	DIODE	1	<R>
D2001-05		1SS254	DIODE	5	<R>
D2501-08		1SS254	DIODE	8	<R>
D2510		1SS254	DIODE	1	<R>
D3002		MA28W-A	DIODE	1	<R>
D3003		1SS254	DIODE	1	<R>
D3301		1SS254	DIODE	1	<R>
D3302		MA151K	DIODE	1	<R>
D3304		MA151K	DIODE	1	<R>
D3403		MA723VT	DIODE	1	<R>
D3408		1SS254	DIODE	1	<R>
D3501		1SS254	DIODE	1	<R>
D3502		MA153	DIODE	1	<R>
D3504		MA151WK	DIODE	1	<R>
D3901		1SS254	DIODE	1	<R>
D3902		MA4130L	DIODE	1	<R>
D3903		1SS254	DIODE	1	<R>
D3904		MA151WK	DIODE	1	<R>
D3906		MA151WA	DIODE	1	<R>
D3908,09		1SS254	DIODE	2	<R>
D4003		MA723VT	DIODE	1	<R>
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D4501-04		MA141K	DIODE	4	<R>
D4601,02		MA141K	DIODE	2	<R>
D4701-03		1SS254	DIODE	3	<R>
D6001		1SS254	DIODE	1	<R>
D6002		MA723VT	DIODE	1	<R>
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D6005		MA151WK	DIODE	1	<R>
D6006		MA151WA	DIODE	1	<R>
D6007		MA151WK	DIODE	1	<R>
D6008		MA151WA	DIODE	1	<R>
D6009		11EQS04	DIODE	1	<R>
D6011,12		11EQS04	DIODE	2	<R>
D6013		MA723VT	DIODE	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D6014		1SS254	DIODE	1	<R>
D6015		MA723VT	DIODE	1	<R>
D7303		MA28WA	DIODE	1	<R>
D7304		MA3100L	DIODE	1	<R>
D7401		MA723VT	DIODE	1	<R>
D7672,73		MA3150H	DIODE	2	<R>
DL801		EFDUN124A13N	DELAY	1	
DL802		EFDVR645A45A	DELAY	1	
DL803		VLD0147	DELAY	1	
FL301		ELB4M022	FILTER	1	
FL302		VLF0639	FILTER	1	
FL801		VLF1079	FILTER	1	
FL3001		ELB4H020	FILTER	1	
FL3601		ELB4R031	FILTER	1	
FL3901		VLF1120	FILTER	1	
FL3902		VLF0765	FILTER	1	
IC301		VEFH20B	IC	1	<R>
IC302		MN3859S	IC	1	<R>
IC303		AN1358S	IC	1	<R>
IC701		M51366SP	IC	1	<R>
IC801		VCR0383	IC	1	<R>
IC802		M52352FP	IC	1	<R>
IC2001		AN3727S	IC	1	<R>
IC2002		UPD4053BG	IC	1	<R>
IC2501		BA6219B	IC	1	<R>
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IC3002		M52055FP	IC	1	<R>
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IC3403		MN155202VZAM	IC	1	<R>
IC3404		MN1280S	IC	1	<R>
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IC3501		LC74760	IC	1	<R>
IC3502		M52055FP	IC	1	<R>
IC3503		NJM2246DA	IC	1	<R>
IC3504		NJM2233BMA	IC	1	<R>
IC3601		AN6308S	IC	1	<R>
IC3901		M52475AP	IC	1	<R>
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IC4902		MN4066BS	IC	1	<R>
IC6001		MN6755320H3W	IC	1	<R>
IC6002		M38024V1BN	IC	1	<R>
IC6003		MN1280S	IC	1	<R>
IC6005		UPD4052BG	IC	1	<R>
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IC6008		TL431CLP	IC	1	<R>
IC7301		TDA3803A	IC	1	<R>
IC7302		TA8721SN	IC	1	<R>
IC7401		M66006FP	IC	1	<R>
IC7651		M52306FP	IC	1	<R>
J3901,02		VJS1470	CONNECTOR (FEMALE)	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
K2		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K4		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K6		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K101,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K107		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K110		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K122		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K210		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K281		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3010		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3908		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K6003-05		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
K7403,04		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K7406-08		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
K7417		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L302		VLQ0188J180	COIL 18UH	1	
L304		VLQ0188J270	COIL 27UH	1	
L305		VLQ0188J101	COIL 100UH	1	
L306		VLQ0188J390	COIL 39UH	1	
L309-11		VLQ0188J330	COIL 33UH	3	
L312		ELESN121JA	COIL 120UH	1	
L701		ELESQ680KA	COIL 68UH	1	
L711		ELQTR39XB	COIL 0.39UH	1	
L712		ELQTR22XB	COIL 0.22UH	1	
L714		VLQEL05F2R7K	COIL 2.7UH	1	
L716		ELESQ560KA	COIL 56UH	1	
L717,18		ELESQ680KA	COIL 68UH	2	
L719		ELESQ120KA	COIL 12UH	1	
L801,02		ELESE681KA	COIL 680UH	2	
L803		ELESN331KA	COIL 330UH	1	
L804		VLQ0407101K	COIL 100UH	1	
L806		VLQ0407101K	COIL 100UH	1	
L807,08		VLQ0188J150	COIL 15UH	2	
L809		VLQ0188J330	COIL 33UH	1	
L810		VLQ0188J150	COIL 15UH	1	
L811		VLQ0188J151	COIL 150UH	1	
L812		VLQ0188J270	COIL 27UH	1	
L813,14		VLQ0188J150	COIL 15UH	2	
L2001		VLQ0569	COIL	1	
L2002		VLQ0556	COIL	1	
L2501		VLP0074	COIL	1	
L2502		ELESN330KA	COIL 33UH	1	
L2503		ELESE102KA	COIL 1000UH	1	
L3001-03		VLQ0188J330	COIL 33UH	3	
L3004		VLQ0398	COIL	1	
L3005-08		VLQ0556	COIL	4	
L3301		VLQ0188J150	COIL 15UH	1	
L3304		VLQ0188J330	COIL 33UH	1	
L3306		VLQ0188J390	COIL 39UH	1	
L3307		VLQ0188J120	COIL 12UH	1	
L3308		VLQ0188J330	COIL 33UH	1	
L3309		VLQ0188J181	COIL 180UH	1	
L3310		VLQ0188J270	COIL 27UH	1	
L3313		ELESE681KA	COIL 680UH	1	
L3315,16		VLQ0188J5R6	COIL 5.6UH	2	
L3318		VLQ0188J330	COIL 33UH	1	
L3323		VLQ0188J330	COIL 33UH	1	
L3401		VLQ0188J150	COIL 15UH	1	
L3404		VLQ0188J220	COIL 22UH	1	
L3405		VLQ0188J330	COIL 33UH	1	
L3412		VLQ0188J330	COIL 33UH	1	
L3415		VLQ0188J120	COIL 12UH	1	
L3501		VLQ0188J330	COIL 33UH	1	
L3502		VLQ0188J5R6	COIL 5.6UH	1	
L3503		VLQ0188J100	COIL 10UH	1	
L3504		VLQ0188J390	COIL 39UH	1	
L3505		VLQ0188J820	COIL 82UH	1	
L3508		VLQ0188J330	COIL 33UH	1	
L3601		VLQEL05S120K	COIL 12UH	1	
L3602,03		VLQEL05S101K	COIL 100UH	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L3604		VLQEL05S151K	COIL 150UH	1	
L3605		VLQEL05S820K	COIL 82UH	1	
L3901-04		ELESE101KA	COIL 100UH	4	
L4001,02		ELESE101KA	COIL 100UH	2	
L4501,02		ELESE101KA	COIL 100UH	2	
L4601		VLQEL07F153J	COIL 15UH	1	
L4701		ELESE471KA	COIL 470UH	1	
L4702		ELESE101KA	COIL 100UH	1	
L4901,02		ELESE102KA	COIL 1000UH	2	
L4903,04		ELESE101KA	COIL 100UH	2	
L4905,06		ELESE102KA	COIL 1000UH	2	
L4907,08		ELESE101KA	COIL 100UH	2	
L4909,10		ELESE102KA	COIL 1000UH	2	
L6001		VLP0083	COIL	1	
L6002		ELESE101KA	COIL 100UH	1	
L6003		VLP0083	COIL	1	
L6007,08		VLP0083	COIL	2	
L6009		ELESE101KA	COIL 100UH	1	
L7301		ELESQ102KA	COIL 1000UH	1	
L7401-03		VLQ0188J330	COIL 33UH	3	
L7404		VLQ0540J330	COIL 33UH	1	
P1001		VJP2593	CONNECTOR (MALE)	1	
P1001		VJS2593	CONNECTOR (FEMALE)	1	
P1002		VJP1142	CONNECTOR (MALE)	1	
P1002		VJS1142	CONNECTOR (FEMALE)	1	
P1102		VJS1932	CONNECTOR (FEMALE)	1	
P1103		VJS1142	CONNECTOR (FEMALE)	1	
P1509		VJS1141	CONNECTOR (FEMALE)	1	
P2001		VJP1232T	CONNECTOR (MALE)	1	
P2001		VJS1738T	CONNECTOR (FEMALE)	1	
P2003		VJP3502	CONNECTOR (MALE)	1	
P2003		VJS3482	CONNECTOR (FEMALE)	1	
P2004		VJS3537A015G	CONNECTOR (FEMALE)	1	
P2902		VJS1738T	CONNECTOR (FEMALE)	1	
P3001		VJS3537A020G	CONNECTOR (FEMALE)	1	
P3002		VJP3233A010	CONNECTOR (MALE)	1	
P3002		VJS3366Z010	CONNECTOR (FEMALE)	1	
P3003		VJF0171	CONNECTOR	1	
P3003		VJP1393T	CONNECTOR (MALE)	1	
P3004		VJF0171T	CONNECTOR	1	
P3004		VJP1393T	CONNECTOR (MALE)	1	
P3801		VJF0171T	CONNECTOR	1	
P4001		VJS2331	CONNECTOR (FEMALE)	1	
P4002		VJP1238T	CONNECTOR (MALE)	1	
P4002		VJS1744T	CONNECTOR (FEMALE)	1	
P4003		VJP1230T	CONNECTOR (MALE)	1	
P4003		VJS1230	CONNECTOR (FEMALE)	1	
P6001		VJS3537A014G	CONNECTOR (FEMALE)	1	
P6003		VJP1233T	CONNECTOR (MALE)	1	
P6003		VJS1739T	CONNECTOR (FEMALE)	1	
P6004		VJP1235T	CONNECTOR (MALE)	1	
P6004		VJS1741T	CONNECTOR (FEMALE)	1	
P6502		VJS1744T	CONNECTOR (FEMALE)	1	
P7401,02		VJS3537A020G	CONNECTOR (FEMALE)	2	
P7503		VJS3366Z010	CONNECTOR (FEMALE)	1	
P7504		VJS1739T	CONNECTOR (FEMALE)	1	
P9001		VJF0171	CONNECTOR	1	
P9002		VJS1741T	CONNECTOR (FEMALE)	1	
PP2001		VJP3042A012W	CONNECTOR (MALE)	1	
PP2002		VJP3042A010W	CONNECTOR (MALE)	1	
PP3001		VJP3042A009W	CONNECTOR (MALE)	1	
PP3002		VJP3042A012W	CONNECTOR (MALE)	1	
PP3003		VJP3042A013W	CONNECTOR (MALE)	1	
PP3011,12		VJP3042A018W	CONNECTOR (MALE)	2	
PP3013		VJP3042A014W	CONNECTOR (MALE)	1	
PP3021-24		VJP3043A012W	CONNECTOR (MALE)	4	
PP3301		VJP3042A011W	CONNECTOR (MALE)	1	
PP4001-03		VJP3186A018W	CONNECTOR (MALE)	3	
PP4501		VJP3042A017W	CONNECTOR (MALE)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
PP7401-03		VJP3043A005W	CONNECTOR (MALE)	3	
PP7404		VJP3043A006W	CONNECTOR (MALE)	1	
PP7405		VJP3043A004W	CONNECTOR (MALE)	1	
PS301		VJS3042B009W	CONNECTOR (FEMALE)	1	
PS302		VJS3042B012W	CONNECTOR (FEMALE)	1	
PS303		VJS3042B013W	CONNECTOR (FEMALE)	1	
PS701-03		VJS3043B005W	CONNECTOR (FEMALE)	3	
PS704		VJS3043B006W	CONNECTOR (FEMALE)	1	
PS2001		VJS3042B012W	CONNECTOR (FEMALE)	1	
PS2002		VJS3042B010W	CONNECTOR (FEMALE)	1	
PS3021-24		VJS3043B012W	CONNECTOR (FEMALE)	4	
PS3302,03		VJS3042B018W	CONNECTOR (FEMALE)	2	
PS3501		VJS3042F014W	CONNECTOR (FEMALE)	1	
PS3601		VJS3042B011W	CONNECTOR (FEMALE)	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE)	3	
PS4701		VJS3042B017W	CONNECTOR (FEMALE)	1	
Q301		MSC2295	TRANSISTOR	1	<R>
Q302		MSB709	TRANSISTOR	1	<R>
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Q306		MSC2295	TRANSISTOR	1	<R>
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Q802		MSC2295	TRANSISTOR	1	<R>
Q803		MSB709	TRANSISTOR	1	<R>
Q2001,02		MSB709	TRANSISTOR	2	<R>
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Q3002		2SB1322	TRANSISTOR	1	<R>
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Q3401,02		MSC2295	TRANSISTOR	2	<R>
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Q3405-07		MSD601	TRANSISTOR	3	<R>
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Q3409		MSB710	TRANSISTOR	1	<R>
Q3410-12		MSD601	TRANSISTOR	3	<R>
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Q3423		MSD601	TRANSISTOR	1	<R>
Q3424		MSB710	TRANSISTOR	1	<R>
Q3425		MSC2295	TRANSISTOR	1	<R>
Q3426,27		MSD601	TRANSISTOR	2	<R>
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Q3602,03		MSC2295	TRANSISTOR	2	<R>
Q3604		MSB709	TRANSISTOR	1	<R>
Q3901,02		2SD1991A	TRANSISTOR	2	<R>
Q3903		MSD1328	TRANSISTOR	1	<R>
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Q3906		MSB709	TRANSISTOR	1	<R>
Q3907		MSD601	TRANSISTOR	1	<R>
Q3912		2SD1996	TRANSISTOR	1	<R>
Q3913-15		MSD601	TRANSISTOR	3	<R>
Q3916		MSB710	TRANSISTOR	1	<R>
Q3917		MSD602	TRANSISTOR	1	<R>
Q3918		MSB710	TRANSISTOR	1	<R>
Q4501		2SD655	TRANSISTOR	1	<R>
Q4551		2SB561	TRANSISTOR	1	<R>
Q4552		2SD1819A	TRANSISTOR	1	<R>
Q4601,02		2SD1819A	TRANSISTOR	2	<R>
Q4701		2SD602A-R	TRANSISTOR	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q4702,03		MSD601	TRANSISTOR	2	<R>
Q4704,05		MSB710	TRANSISTOR	2	<R>
Q4706		2SB1378	TRANSISTOR	1	<R>
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Q4708		2SB1378	TRANSISTOR	1	<R>
Q6001		2SD1991A	TRANSISTOR	1	<R>
Q6002		MSB709	TRANSISTOR	1	<R>
Q6003		2SD1915F	TRANSISTOR	1	<R>
Q6004-06		MSD601	TRANSISTOR	3	<R>
Q6008		2SD1991	TRANSISTOR	1	<R>
Q7301		MSD601-S	TRANSISTOR	1	<R>
Q7304,05		MSD601	TRANSISTOR	2	<R>
Q7306		2SC2404	TRANSISTOR	1	<R>
Q7307		2SD1328-S	TRANSISTOR	1	<R>
QR301		MRN1402	TRANSISTOR-RESISTOR	1	<R>
QR302		MRN1403	TRANSISTOR-RESISTOR	1	<R>
QR303		MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR304		MRN1402	TRANSISTOR-RESISTOR	1	<R>
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QR308		MRN1407	TRANSISTOR-RESISTOR	1	<R>
QR309		MRN1402	TRANSISTOR-RESISTOR	1	<R>
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QR311		MRN2404	TRANSISTOR-RESISTOR	1	<R>
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QR315		MRN2404	TRANSISTOR-RESISTOR	1	<R>
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QR318		MRN1402	TRANSISTOR-RESISTOR	1	<R>
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QR701,02		MRN1404	TRANSISTOR-RESISTOR	2	<R>
QR801,02		MRN1404	TRANSISTOR-RESISTOR	2	<R>
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QR2001		XN1213	TRANSISTOR-RESISTOR	1	<R>
QR2002		MRN2404	TRANSISTOR-RESISTOR	1	<R>
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QR3001,02		MRN1403	TRANSISTOR-RESISTOR	2	<R>
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QR3301-04		DTC363EK	TRANSISTOR-RESISTOR	4	<R>
QR3305		UN211D	TRANSISTOR-RESISTOR	1	<R>
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QR3307,08		MRN1404	TRANSISTOR-RESISTOR	2	<R>
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QR3901-03		MRN1404	TRANSISTOR-RESISTOR	3	<R>
QR3904,05		MRN1402	TRANSISTOR-RESISTOR	2	<R>
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QR4002,03		DTC363EK	TRANSISTOR-RESISTOR	2	<R>
QR4004,05		MRN1404	TRANSISTOR-RESISTOR	2	<R>
QR4508,09		UN5113	TRANSISTOR-RESISTOR	2	<R>
QR4510		UN5212	TRANSISTOR-RESISTOR	1	<R>
QR4602		UN5111	TRANSISTOR-RESISTOR	1	<R>
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QR4701-03		MRN1403	TRANSISTOR-RESISTOR	3	<R>
QR4704		MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR4901		MRN1404	TRANSISTOR-RESISTOR	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR4902		UN211D	TRANSISTOR-RESISTOR	1	<R>
QR6001		MRN1402	TRANSISTOR-RESISTOR	1	<R>
QR6002,03		MRN2402	TRANSISTOR-RESISTOR	2	<R>
QR6004		MRN1402	TRANSISTOR-RESISTOR	1	<R>
QR6009		XN1213	TRANSISTOR-RESISTOR	1	<R>
QR6012		MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR6013		MRN1403	TRANSISTOR-RESISTOR	1	<R>
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QR6015		MRN2402	TRANSISTOR-RESISTOR	1	<R>
QR7301,02		MRN1404	TRANSISTOR-RESISTOR	2	<R>
QR7312-14		MRN1402	TRANSISTOR-RESISTOR	3	<R>
QR7315,16		MRN1404	TRANSISTOR-RESISTOR	2	<R>
QR7401		MRN2403	TRANSISTOR-RESISTOR	1	<R>
			RESISTORS		
R301		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R303		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R304		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R305		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R306		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R307		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R308		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R309		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R310		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R311		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R312		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R313		ERJ6GMYJ361	M.RESISTOR CH1/10W 360	1	
R314		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R315		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R316		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R317		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R318		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	1	
R319		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R320		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R321		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R322		ERJ6GMYG123	M.RESISTOR CH1/10W 12K	1	
R323		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R324		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R325		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R326		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R327		ERJ6GMYG432	M.RESISTOR CH1/10W 4.3K	1	
R328		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R329		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R330		ERJ6GMYG432	M.RESISTOR CH1/10W 4.3K	1	
R331		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R332		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R333		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R334		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R335		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R336		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R337		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R338,39		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R340		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R341		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R342		ERJ6GMYJ181	M.RESISTOR CH1/10W 180	1	
R343		ERJ6GMYJ273	M.RESISTOR CH1/10W 27K	1	
R344		ERJ6GMYJ911	M.RESISTOR CH1/10W 910	1	
R345		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R346		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R347		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R348		ERJ6GMYJ273	M.RESISTOR CH1/10W 27K	1	
R349		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R350		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R351		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R352		ERJ6GMYG183	M.RESISTOR CH1/10W 18K	1	
R353		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R354		ERJ6GMYG753	M.RESISTOR CH1/10W 75K	1	
R355		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R356		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R357		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R358		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R359		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R360,61		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R716		ERJ6GEYJ152	M.RESISTOR CH1/10W 1.5K	1	
R717		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	1	
R718		ERJ6GEYJ754	M.RESISTOR CH1/10W 750K	1	
R719		ERJ6GEYJ682	M.RESISTOR CH1/10W 6.8K	1	
R720		ERJ6GEYJ622	M.RESISTOR CH1/10W 6.2K	1	
R721		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R723		ERJ6GEYJ183	M.RESISTOR CH1/10W 18K	1	
R724		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R725		ERJ6GEYJ182	M.RESISTOR CH1/10W 1.8K	1	
R726		ERJ6GEYJ472	M.RESISTOR CH1/10W 4.7K	1	
R727		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	1	
R728		ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R731		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	1	
R732		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R737		ERJ6GEYJ274	M.RESISTOR CH1/10W 270K	1	
R738		ERJ6GEYJ334	M.RESISTOR CH1/10W 330K	1	
R740		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	1	
R741		ERJ6GEYJ562	M.RESISTOR CH1/10W 5.6K	1	
R743		ERJ6GEYJ470	M.RESISTOR CH1/10W 47	1	
R744		ERJ6GEYJ821	M.RESISTOR CH1/10W 820	1	
R745		ERJ6GEYJ331	M.RESISTOR CH1/10W 330	1	
R746		ERDS2TJ181	C.RESISTOR 1/4W 180	1	
R747		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	1	
R750		ERJ6GEYJ182	M.RESISTOR CH1/10W 1.8K	1	
R759		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R772		ERJ6GEYJ271	M.RESISTOR CH1/10W 270	1	
R773		ERJ6GEYJ472	M.RESISTOR CH1/10W 4.7K	1	
R774		ERJ6GEYJ562	M.RESISTOR CH1/10W 5.6K	1	
R792		ERDS2TJ120	C.RESISTOR 1/4W 12	1	
R801		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R802		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R803		ERJ6GMYG242	M.RESISTOR CH1/10W 2.4K	1	
R804,05		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R809		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R810,11		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R814		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R815		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R816		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R817		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R818		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R820		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R821,22		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R824		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R825		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R826		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	1	
R827		ERJ6GMYJ154	M.RESISTOR CH1/10W 150K	1	
R828		ERJ6GMYJ204	M.RESISTOR CH1/10W 200K	1	
R829		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R830		ERJ6GMYJ154	M.RESISTOR CH1/10W 150K	1	
R831		ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	1	
R832		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R833		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R834		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R835,36		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	2	
R837		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R838,39		ERJ6GMYJ681	M.RESISTOR CH1/10W 680	2	
R840		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R841		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R842,43		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	2	
R844		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R845		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R846		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R847		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R848		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R849		ERJ6GMYK395	M.RESISTOR CH1/10W 3.9M	1	
R850		ERJ6GMYJ302	M.RESISTOR CH1/10W 3K	1	
R851,52		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R853		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R1001		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R2004		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R2005		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R2011		ERJ6GMYG222	M.RESISTOR CH1/10W 2.2K	1	
R2012		ERJ6GMYG392	M.RESISTOR CH1/10W 3.9K	1	
R2013,14		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	2	
R2015		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R2016		ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R2018		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R2019		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R2501		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2502		ERJ6GMYG112	M.RESISTOR CH1/10W 1.1K	1	
R2503		ERJ6GMYG102	M.RESISTOR CH1/10W 1K	1	
R2504		ERJ6GMYG332	M.RESISTOR CH1/10W 3.3K	1	
R2505		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R2506		ERJ6GMYJ564	M.RESISTOR CH1/10W 560K	1	
R2507		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R2508		VRE0034E512	M.RESISTOR CH 1/10W 5.1K	1	
R2509		VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R2510		ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R2511		ERJ6GMYJ684	M.RESISTOR CH1/10W 680K	1	
R2513		ERJ6GMYG133	M.RESISTOR CH1/10W 13K	1	
R2514		ERJ6GMYG821	M.RESISTOR CH1/10W 820	1	
R2515		ERG12SJ561	M.RESISTOR 1/2W 560	1	
R2516		ERJ6GMYG473	M.RESISTOR CH1/10W 47K	1	
R2517		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2518		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R2519		ERJ6GMYG432	M.RESISTOR CH1/10W 4.3K	1	
R2520		ERJ6GMYG103	M.RESISTOR CH1/10W 10K	1	
R2521-23		ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2524		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R2525		EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2526		ERJ6GMYJ392	M.RESISTOR CH1/10W 3.9K	1	
R2527		ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R2528		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R2529		ERJ6GMYJ392	M.RESISTOR CH1/10W 3.9K	1	
R2530		ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R2531,32		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	2	
R2533		ERJ6GMYJ393	M.RESISTOR CH1/10W 39K	1	
R2534		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R2535		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R2536		ERJ6GMYJ824	M.RESISTOR CH1/10W 820K	1	
R2537		ERJ6GMYJ393	M.RESISTOR CH1/10W 39K	1	
R2538		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R2539		ERJ6GMYJ681	M.RESISTOR CH1/10W 680	1	
R2540		ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R2541		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R3001,02		ERJ6GMYJ750	M.RESISTOR CH1/10W 75	2	
R3003		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R3004		ERJ6GMYJ683	M.RESISTOR CH1/10W 68K	1	
R3005		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3006,07		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R3008		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3009		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3010		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3011		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3012		ERJ6GMYG911	M.RESISTOR CH1/10W 910	1	
R3013		ERJ6GMYG102	M.RESISTOR CH1/10W 1K	1	
R3014		ERJ6GMYG471	M.RESISTOR CH1/10W 470	1	
R3015		ERJ6GMYG102	M.RESISTOR CH1/10W 1K	1	
R3016		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3017		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3018		ERJ6GMYJ392	M.RESISTOR CH1/10W 3.9K	1	
R3019		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3021		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3022		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R3023		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
R3024		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	1	
R3025		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
R3026,27		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R3301		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3302		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R3303		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3304		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3305		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R3306		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3307		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3308		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3310		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3322		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R3323		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R3324		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3325,26	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R3327	ERJ6GMYJ821	M.RESISTOR CH1/10W 820	1	
R3328	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3333	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3334	ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R3335	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3336,37	ERJ6GMYJ681	M.RESISTOR CH1/10W 680	2	
R3338	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3339	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3340	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3341	ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3342	ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R3345-47	ERJ6GMYJ821	M.RESISTOR CH1/10W 820	3	
R3352	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3353	ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R3401	ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3402	ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R3403	ERJ6GMYG361	M.RESISTOR CH 1/10W 360	1	
R3404	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3405	ERJ6GMYG123	M.RESISTOR CH1/10W 12K	1	
R3406	ERJ6GMYG512	M.RESISTOR CH1/10W 5.1K	1	
R3407	ERJ6GMYG272	M.RESISTOR CH1/10W 2.7K	1	
R3408	ERJ6GMYG302	M.RESISTOR CH1/10W 3K	1	
R3409	ERJ6GMYG821	M.RESISTOR CH1/10W 820	1	
R3410	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3411-13	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	3	
R3415	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3417	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3422	ERJ6GMYG333	M.RESISTOR CH1/10W 33K	1	
R3423	ERJ6GMYG683	M.RESISTOR CH1/10W 68K	1	
R3424	ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3425	ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R3426	ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R3427	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3428	ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R3429	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3430	ERJ6GMYJ823	M.RESISTOR CH1/10W 82K	1	
R3431	ERJ6GMYG821	M.RESISTOR CH1/10W 820	1	
R3433	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3434	ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R3435	ERJ6GMYG302	M.RESISTOR CH1/10W 3K	1	
R3436	ERJ6GMYG272	M.RESISTOR CH1/10W 2.7K	1	
R3437	ERJ6GMYG512	M.RESISTOR CH1/10W 5.1K	1	
R3438	ERJ6GMYG123	M.RESISTOR CH1/10W 12K	1	
R3441	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R3442	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3443	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R3444,45	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	2	
R3446,47	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R3463	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3464	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3465	ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R3466	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3467	ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R3468,69	ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	2	
R3470	ERJ6GMYG123	M.RESISTOR CH1/10W 12K	1	
R3471	ERJ6GMYG512	M.RESISTOR CH1/10W 5.1K	1	
R3472	ERJ6GMYG272	M.RESISTOR CH1/10W 2.7K	1	
R3473	ERJ6GMYG302	M.RESISTOR CH1/10W 3K	1	
R3474	ERJ6GMYG821	M.RESISTOR CH1/10W 820	1	
R3475	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3476	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3477,78	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R3479	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3501	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3502	ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R3503	ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3504,05	ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R3506	ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R3507	ERJ6GMYG103	M.RESISTOR CH1/10W 10K	1	
R3508	ERJ6GMYG332	M.RESISTOR CH1/10W 3.3K	1	
R3509-11	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	3	
R3513,14	ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	2	
R3515	ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R3516	ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3517	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3518	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3519	ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3520	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3521	ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R3522	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3523	ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R3524	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3525	ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R3526	ERJ6GMYJ470	M.RESISTOR CH1/10W 47	1	
R3601	ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3602	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3603	ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R3604	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3605	ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R3606	ERJ6GMYJ821	M.RESISTOR CH1/10W 820	1	
R3607-12	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	6	
R3613	ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R3614	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3616	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3901-05	ERJ6GMYJ750	M.RESISTOR CH1/10W 75	5	
R3906	ERDS1TJ750	C.RESISTOR 1/2W 75	1	
R3908,09	ERJ6GMYJ750	M.RESISTOR CH1/10W 75	2	
R3910,11	ERJ6GMYJ471	M.RESISTOR CH1/10W 470	2	
R3912,13	ERJ6GMYJ151	M.RESISTOR CH1/10W 150	2	
R3914	ERJ6GMYJ750	M.RESISTOR CH1/10W 75	1	
R3915	ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3916,17	ERDS2TJ181	C.RESISTOR 1/4W 180	2	
R3926	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3927,28	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R3929	ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3930	ERJ6GMYJ112	M.RESISTOR CH1/10W 1.1K	1	
R3931	ERJ6GMYJ123	M.RESISTOR CH1/10W 12K	1	
R3932	ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R3933	ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R3934	ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R3935	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3936	ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R3938	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3945	ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R3946	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3950,51	ERJ6GMYJ331	M.RESISTOR CH1/10W 330	2	
R3953	ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R3954	ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R3955	ERJ6GMYJ123	M.RESISTOR CH1/10W 12K	1	
R3956	ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R3957-60	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	4	
R3961	ERJ6GMYJ750	M.RESISTOR CH1/10W 75	1	
R3962	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3963	ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R3964	ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R3965	ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R3966	ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R3967	ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3968	ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4001,02	ERDS2TJ680	C.RESISTOR 1/4W 68	2	
R4003-08	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	6	
R4009	ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R4010	ERJ6GMYG433	M.RESISTOR CH1/10W 43K	1	
R4011	ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R4012	ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R4013	ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R4014	ERJ6GMYG100	M.RESISTOR CH1/10W 10	1	
R4015	ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R4020	ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R4021	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R4022	ERJ6GMYJ273	M.RESISTOR CH1/10W 27K	1	
R4028	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R4029,30	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R4033	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4034	ERJ6GMYG393	M.RESISTOR CH1/10W 39K	1	
R4035	ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4036	ERJ6GMYG393	M.RESISTOR CH1/10W 39K	1	
R4501,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503	ERJ3GEYG223	M.RESISTOR CH1/16W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4504,05		ERJ3GEYJ393	M.RESISTOR CH1/16W 39K	2	
R4506,07		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	2	
R4508		ERJ3GEYG224	M.RESISTOR CH1/16W 220K	1	
R4509		ERJ3GEYJ622	M.RESISTOR CH 1/16W 6.2K	1	
R4511		ERJ3GEYG273	M.RESISTOR CH1/16W 27K	1	
R4512		VRE0071E163	M.RESISTOR 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH1/16W 10K	1	
R4514,15		ERJ3GEYJ223	M.RESISTOR CH1/16W 22K	2	
R4518,19		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4522		ERJ3GEYJ225	M.RESISTOR CH1/16W 2.2M	1	
R4527		VRE0071E333	M.RESISTOR 33K	1	
R4528		VRE0071E153	M.RESISTOR 15K	1	
R4529		ERJ3GEYG562	M.RESISTOR CH1/16W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH1/16W 330K	1	
R4534		ERJ3GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH1/16W 100K	1	
R4539		ERJ3GEYJ104	M.RESISTOR CH1/16W 100K	1	
R4541		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R4542		ERJ3GEYJ222	M.RESISTOR CH1/16W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH1/16W 39K	2	
R4553,54		ERJ3GEYJ273	M.RESISTOR CH1/16W 27K	2	
R4558		ERJ3GEYG224	M.RESISTOR CH1/16W 220K	1	
R4561		ERJ3GEYG273	M.RESISTOR CH1/16W 27K	1	
R4562		VRE0034E10C	M.RESISTOR CH 1/10W 1	1	
R4563		ERJ3GEYG272	M.RESISTOR CH1/16W 2.7K	1	
R4568,69		ERJ3GEYJ273	M.RESISTOR CH1/16W 27K	2	
R4573		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R4578		VRE0071E473	M.RESISTOR 47K	1	
R4581		ERJ3GEYJ104	M.RESISTOR CH1/16W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH1/16W 1K	1	
R4584		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R4592		ERJ3GEYJ563	M.RESISTOR CH1/16W 56K	1	
R4593		ERJ3GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R4596		ERJ3GEYG473	M.RESISTOR CH1/16W 47K	1	
R4597		ERJ3GEYJ103	M.RESISTOR CH1/16W 10K	1	
R4598,99		ERJ3GEYG104	M.RESISTOR CH1/16W 100K	2	
R4603		ERJ3GEYG183	M.RESISTOR CH1/16W 18K	1	
R4606		ERJ3GEYJ562	M.RESISTOR CH1/16W 5.6K	1	
R4610		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R4611		ERJ3GEYJ101	M.RESISTOR CH1/16W 100	1	
R4612		ERJ3GEYJ331	M.RESISTOR CH1/16W 330	1	
R4613		ERJ3GEYJ394	M.RESISTOR CH1/16W 390K	1	
R4615		ERJ3GEYJ133	M.RESISTOR CH1/16W 13K	1	
R4616		ERJ3GEYJ105	M.RESISTOR CH1/16W 1M	1	
R4638		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4649		ERJ3GEYJ470	M.RESISTOR CH1/16W 47	1	
R4651		ERJ3GEYJ101	M.RESISTOR CH1/16W 100	1	
R4652		ERJ3GEYJ223	M.RESISTOR CH1/16W 22K	1	
R4653		ERJ3GEYJ221	M.RESISTOR CH1/16W 220	1	
R4654		ERJ3GEYJ223	M.RESISTOR CH1/16W 22K	1	
R4655		ERJ3GEYJ562	M.RESISTOR CH1/16W 5.6K	1	
R4656		ERJ3GEYG243	M.RESISTOR CH1/16W 24K	1	
R4657		ERJ3GEYJ392	M.RESISTOR CH1/16W 3.9K	1	
R4666		ERJ3GEYJ471	M.RESISTOR CH1/16W 470	1	
R4671		ERJ3GEYG103	M.RESISTOR CH1/16W 10K	1	
R4701		ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	1	
R4702		ERJ6GMYJ821	M.RESISTOR CH1/10W 820	1	
R4703		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R4704,05		ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	2	
R4706		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R4707		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R4708		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4709		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R4710		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4711		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R4712		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R4713		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4714		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4715		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R4716		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4717		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R4718		ERJ6GMYG753	M.RESISTOR CH1/10W 75K	1	
R4719		ERJ6GMYG203	M.RESISTOR CH1/10W 20K	1	
R4720,21		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	2	
R4722		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R4723		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R4724,25		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	2	
R4726		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R4901,02		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	2	
R4903,04		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	2	
R4905,06		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	2	
R4907,08		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	2	
R4909,10		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R4915-18		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	4	
R4921		ERJ6GMYG163	M.RESISTOR CH1/10W 16K	1	
R4922,23		ERJ6GMYG433	M.RESISTOR CH1/10W 43K	2	
R4924		ERJ6GMYG163	M.RESISTOR CH1/10W 16K	1	
R4925		ERJ6GMYG473	M.RESISTOR CH1/10W 47K	1	
R4926		ERJ6GMYG223	M.RESISTOR CH1/10W 22K	1	
R4927,28		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	2	
R4929		ERJ6GMYG223	M.RESISTOR CH1/10W 22K	1	
R4930		ERJ6GMYG473	M.RESISTOR CH1/10W 47K	1	
R4931		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R6001		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6002,03		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	2	
R6004		EROS2CKG2000	M.RESISTOR 1/4W 200	1	
R6005		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R6006		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6007-09		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	3	
R6010,11		ERJ6GMYG223	M.RESISTOR CH1/10W 22K	2	
R6012		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6013		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6015,16		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6017		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6018		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6019		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6020,21		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6022-24		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	3	
R6025		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R6027		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R6028		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6029		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R6030		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R6031		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R6032,33		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	2	
R6034		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6035		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R6036		ERJ6GMYJ123	M.RESISTOR CH1/10W 12K	1	
R6037,38		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R6039,40		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	2	
R6041		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	1	
R6042		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R6044-49		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	6	
R6050		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6051		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R6052		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R6053		ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R6054		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6055		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R6056,57		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	2	
R6058,59		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6060		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6061,62		ERJ6GMYJ683	M.RESISTOR CH1/10W 68K	2	
R6063		ERJ6GMYJ224	M.RESISTOR CH1/10W 220K	1	
R6064		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R6066		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6067		ERJ6GMYJ181	M.RESISTOR CH1/10W 180	1	
R6068-70		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	3	
R6071		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R6074		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R6075		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6076		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R6077		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6078		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6079		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6081		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R6082		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6083-86		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	4	
R6087,88		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	2	
R6089,90		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6091		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6092,93		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	2	
R6094,95		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	2	
R6096		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R6097,98		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6099		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R6100		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6101		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6102,03		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	2	
R6104		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6106,07		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R6108		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6109		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R6110		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6112		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6114		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6116		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6118		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6120		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6122		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6123		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R6124		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6125		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R7302		ERJ6GEYJ392	M.RESISTOR CH1/10W 3.9K	1	
R7303		ERJ6GEYJ182	M.RESISTOR CH1/10W 1.8K	1	
R7304		ERJ6GEYJ392	M.RESISTOR CH1/10W 3.9K	1	
R7305		ERJ6GEYJ822	M.RESISTOR CH1/10W 8.2K	1	
R7306		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	1	
R7307		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R7308		ERJ6GEYJ273	M.RESISTOR CH1/10W 27K	1	
R7309		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7310		ERJ6GEYJ474	M.RESISTOR CH1/10W 470K	1	
R7311		ERJ6GEYJ562	M.RESISTOR CH1/10W 5.6K	1	
R7312		ERJ6GEYJ563	M.RESISTOR CH1/10W 56K	1	
R7313		ERJ6GEYJ824	M.RESISTOR CH1/10W 820K	1	
R7314,15		ERJ6GEYJ224	M.RESISTOR CH1/10W 220K	2	
R7316		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	1	
R7317		ERJ6GEYJ393	M.RESISTOR CH1/10W 39K	1	
R7318		ERJ6GEYJ153	M.RESISTOR CH1/10W 15K	1	
R7321		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7322		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7323		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7324,25		ERJ6GEYJ271	M.RESISTOR CH1/10W 270	2	
R7329		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7330		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	1	
R7334-37		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	4	
R7338		ERJ6GEYJ182	M.RESISTOR CH1/10W 1.8K	1	
R7339		ERJ6GEYJ330	M.RESISTOR CH1/10W 33	1	
R7340		ERJ6GEYJ152	M.RESISTOR CH1/10W 1.5K	1	
R7341		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	1	
R7342		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7345		ERJ6GEYJ182	M.RESISTOR CH1/10W 1.8K	1	
R7346		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
R7347		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	1	
R7348		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R7349		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7351-53		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	3	
R7354,55		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	2	
R7403		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R7407,08		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R7410-12		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	3	
R7413-19		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	7	
R7420		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R7421-23		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	3	
R7651		ERJ6GEYJ224	M.RESISTOR CH1/10W 220K	1	
R7652		ERJ6GEYJ331	M.RESISTOR CH1/10W 330	1	
R7653		ERJ6GEYF124	M.RESISTOR CH1/10W 120K	1	
R7654		ERJ6GEYJ223	M.RESISTOR CH1/10W 22K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7655		ERJ6GEYJ334	M.RESISTOR CH1/10W 330K	1	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	
RX3401		EXBF8E102J	RESISTOR-RESISTOR	1	
SW3901		VSS0385	SWITCH	1	<R>
T703		EIV5EC013A	TRANSFORMER	1	
T704		EIV5EC006A1	TRANSFORMER	1	
T4701		VLT0695	TRANSFORMER	1	
T4702		VLT0696	TRANSFORMER	1	
T7301		EIR7QG001B	TRANSFORMER	1	
T7302,03		EIL7QH012Q	TRANSFORMER	2	
T7304		EIS5EC017A	TRANSFORMER	1	
T7305		EQS5EC033A	TRANSFORMER	1	
TR		VJS3481	CONNECTOR (FEMALE)	1	
VR301		EVN49CA00B23	V.RESISTOR 2K	1	
VR302		EVN49CA00B13	V.RESISTOR 1K	1	
VR303		EVNCBAA00B13	V.RESISTOR 1K	1	
VR304		EVN49CA00B13	V.RESISTOR 1K	1	
VR701		EVMEASA00B23	V.RESISTOR 2K	1	
VR801,02		EVMEASA00B13	V.RESISTOR 1K	2	
VR803		EVMEASA00B14	V.RESISTOR 10K	1	
VR804		EVN49CA00B53	V.RESISTOR 5K	1	
VR2001-05		EVNCYAA03B54	V.RESISTOR 500K	5	
VR3001-03		EVNCYAA03B23	V.RESISTOR 2K	3	
VR3301		EVMEASA00B24	V.RESISTOR 20K	1	
VR3302		EVN49CA00B54	V.RESISTOR 50K	1	
VR3304,05		EVN49CA00B52	V.RESISTOR 500	2	
VR3307		EVN49CA00B54	V.RESISTOR 50K	1	
VR3901		EVMEASA00B24	V.RESISTOR 20K	1	
VR4002		EVNCYAA03B25	V.RESISTOR 200K	1	
VR4501		EVMECSA00B53	V.RESISTOR 5K	1	
VR4502		EVMEASA00BY4	V.RESISTOR	1	
VR4507		EVMEASA00BY4	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4512		EVNCBAA00B52	V.RESISTOR 500	1	
VR4550		EVMECSA00B14	V.RESISTOR 10K	1	
VR4551,52		EVMEASA00B55	V.RESISTOR 500K	2	
VR7301		EVMEASA00B14	V.RESISTOR 10K	1	
VR7326		EVMEASA00B52	V.RESISTOR 500	1	
VR7328		EVMEASA00B52	V.RESISTOR 500	1	
VR7340		EVNCBAA00B14	V.RESISTOR 10K	1	
VR7342		EVNCBAA00B53	V.RESISTOR 5K	1	
VR7344		EVNCBAA00B14	V.RESISTOR 10K	1	
VR7660		EVNCBAA00B15	V.RESISTOR 100K	1	
W31		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W32		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W33		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W100		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W101		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W101		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W101		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W102		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W102		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W103		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W103		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W104		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W104		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W105		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
W105		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W106		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W106		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W106		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W107		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W107		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W108		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W109		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W109		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W110		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W111		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W112		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W113		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W114		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W115,16		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W116-20		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	5	
W120-23		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	4	
W123,24		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W124,25		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W125,26		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W126-38		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	13	
W138-43		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	6	
W143,44		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W144,45		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W145-47		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
W147-50		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	4	
W150,51		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W151,52		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W152,53		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W153-56		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	4	
W156-65		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	10	
W167-74		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	8	
W192-95		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	4	
W201-05		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	5	
W205,06		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W206,07		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W207,08		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W208-17		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	10	
W220		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
X710		VLF1060	CRYSTAL OSCILLATOR	1	<R>
X711		VLF0638	CRYSTAL OSCILLATOR	1	<R>
X716		EFCV4045A4	CRYSTAL OSCILLATOR	1	<R>
X720		VLF1061	CRYSTAL OSCILLATOR	1	<R>
X801		VSX0406	CRYSTAL OSCILLATOR	1	<R>
X3302		EF0GC3584A5	CRYSTAL OSCILLATOR	1	<R>
X3501		VSX0574	CRYSTAL OSCILLATOR	1	<R>
X6001		VSX0583	CRYSTAL OSCILLATOR	1	<R>
X6002		EF0EC7374T4E	CRYSTAL OSCILLATOR	1	
X7001		VSQ0565	CRYSTAL OSCILLATOR	1	<R>
X7301,02		EFCS5R5MS5B	CRYSTAL OSCILLATOR	2	
X7303,04		EFCS5R74MS5B	CRYSTAL OSCILLATOR	2	
X7305		ELB5A016	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
		VEE8682	WIRE CABLE	1	(P1001-P1102)
		VEE8683	WIRE CABLE	1	(P1002-P1103)
		VWJ0775A	FLAT CARD CABLE	1	(P2004-P1507)
		VWJ0776B	FLAT CARD CABLE	1	(P3001-P501)
		VWJ0778A	FLAT CARD CABLE	1	(P7401-P7501)
		VWJ0801B	FLAT CARD CABLE	1	(P7402-P7502)
		VMA6768	EARTH ANGLE	1	
		VJF1031	CLAMPER	1	
		XTV3+10J	SCREW	2	
		VEE8687	WIRE CABLE	1	(P4003-P1509)
		XTV3+8J	SCREW	2	
		VEE9262	WIRE CABLE	1	(P3801-P3004)
		ENC17984	RF CONVERTER	1	<!>
		VEE9099	WIRE CABLE	1	(POWER TR.-P2003)
		VJH0683	RF ANT TERMINAL PLATE	1	
		VEE8688	WIRE CABLE	1	(P2001-P2902)

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VEE8685	WIRE CABLE	1	(P4002-P6502)
		VEE8686	WIRE CABLE	1	(P6003-P7504)
		VEE8837	WIRE CABLE	1	(P3002-P7503)
		VEE8834	WIRE CABLE	1	(P3003-P9001)
		VEE8835	WIRE CABLE	1	(P6004-P9002)
		ENV578D7H6	TUNER	1	<!> FOR TV DEMODU
		VSC4025	SHIELD COVER (MAIN)	1	FOR TV DEMODULATOR
		VSC3241	SHIELD COVER (TOP)	1	FOR TV DEMODULATOR
		VMX2233	SPACER	1	FOR SUB Y/C
		VEJ1438	JACK PLATE	1	FOR I/O
		XTV3+8GFZ	SCREW	1	FOR I/O
		VEP03A37T	P.C.BOARD W/COMPONENT		AG-4700B
			MAIN		
		VEP07680K	P.C.BOARD W/COMPONENT		ON VEP03A37T
			TV DEMODULATOR		
		VEP02412B	P.C.BOARD W/COMPONENT		ON VEP03A37T
			CAP DRIVE		
		VEP03A61E	P.C.BOARD W/COMPONENT		ON VEP03A37T
			Y/C		
		VEP03A62C	P.C.BOARD W/COMPONENT		ON VEP03A37T
			SUB Y/C		
		VEP03A90A	P.C.BOARD W/COMPONENT		ON VEP03A37T
			REC/RF		
		VEP03A72D	P.C.BOARD W/COMPONENT		ON VEP03A37T
			INPUT/OUTPUT		
		VEP04417C	P.C.BOARD W/COMPONENT		ON VEP03A37T
			SUB AUDIO		
		VEP04447E	P.C.BOARD W/COMPONENT		ON VEP03A37T
			FM AUDIO		
		VEP07675A	P.C.BOARD W/COMPONENT		ON VEP03A37T
			DECORDER		
			CAPACITORS		
C301		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C303		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C305		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C306		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C307		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C308		ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C309		ECUM1H562KBN	C.CAPACITOR CH 50V 5600P	1	
C310		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C311		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C312		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C313		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C314		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C315,16		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C317		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C318		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C319		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C321,22		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	2	
C324		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C325,26		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C329		ECQV1H334JM	P.CAPACITOR 50V 0.33U	1	
C331		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C332,33		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C334		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C335		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C336		ECEA1EKN4R7	E.CAPACITOR 25V 4.7U	1	
C337		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C338		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C339		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C340		ECEA0JKA220	E.CAPACITOR 6.3V 22U	1	
C341		ECEA1CKA100	E.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C342		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C343		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C344		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C345,46		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C348		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C349		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C350		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C701		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C702,03		ECEA1EK4R7	E.CAPACITOR 25V 4.7U	2	
C706		ECUM1H104ZFG	C.CAPACITOR CH 50V 0.1U	1	
C708		ECEA1CK220	E.CAPACITOR 16V 22U	1	
C710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C719,20		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C721		ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C723		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C725		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C728		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C730		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C731		VCEA1CAC100	E.CAPACITOR 16V 10U	1	
C732		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C735		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C736,37		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C739		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C740		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C741		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C742		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C743		ECUM1H270JSN	C.CAPACITOR CH 50V 27P	1	
C744,45		ECEA1HK0R1	E.CAPACITOR 50V 0.1U	2	
C746		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C747		ECUM1H680JPN	C.CAPACITOR CH 50V 68P	1	
C748		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C749		ECEA1CPK100	E.CAPACITOR 16V 10U	1	
C760		ECQV1H563JM	P.CAPACITOR 50V 0.056U	1	
C761		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C782		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C802		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C803		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C804		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C805,06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C808		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C809		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C810		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C811-13		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C814		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C815		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C816		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C817		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C818		ECEA1HKA0R1	E.CAPACITOR 50V 0.1U	1	
C819		ECWM1H332JZ	F.CAPACITOR 50V 3300P	1	
C820		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C821-23		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C824		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C825-27		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C828,29		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	2	
C830		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C831		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
C832		ECQV1H154JM	P.CAPACITOR 50V 0.15U	1	
C833		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C834		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C835		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C836		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C1001		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2001		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2003		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C2005		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2006		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C2007		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2009		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C2010		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2501-04		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C2505		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2506		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C2507		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C2508-10		ECEA1HKA2R2	E.CAPACITOR 50V 2.2U	3	
C2511-14		VCUM1H333KBN	C.CAPACITOR 50V 0.033U	4	
C2515		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C2516		ECEA1HKAR22	E.CAPACITOR 50V 0.22U	1	
C2517		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2518		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2519,20		VCUM1H333KBN	C.CAPACITOR 50V 0.033U	2	
C2521		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C2522		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2523		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C2524,25		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C2526		ECA0JM221	E.CAPACITOR 6.3V 220U	1	
C2527		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C2528		ECEA1HKNR47	E.CAPACITOR 50V 0.47U	1	
C2529		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C2530		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C2531		ECUM1E224ZFN	C.CAPACITOR CH 25V 0.22U	1	
C2532		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C2533		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C2534,35		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
C3001		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1	
C3002		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3003-06		ECEA1HKA010	E.CAPACITOR 50V 1U	4	
C3007,08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3009		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3010		ECA1AM331	E.CAPACITOR 10V 330U	1	
C3011		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3012		ECA1AM331	E.CAPACITOR 10V 330U	1	
C3013		ECA0JM331	E.CAPACITOR 6.3V 330U	1	
C3014		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3015		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3016		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3017-19		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C3022		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3023,24		ECEA1AKA330	E.CAPACITOR 10V 33U	2	
C3027,28		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3029		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3030		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3031		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3032		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3033		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3301		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3302		ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C3304-08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3309		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3310		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3312-14		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3321		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3322		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3323		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3324		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3325		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3326		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3327,28		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C3329		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3330		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3336		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3338		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3339		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3340		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3341		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3342		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3343		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3344		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3345		ECUM1H391JCN	C.CAPACITOR CH 50V 390P	1	
C3346		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3347		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C3351,52		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	2	
C3353		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3354		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3372		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3401		ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C3402		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3403-07		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	5	
C3408,09		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C3421		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C3422		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3423		ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1	
C3424		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3425		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3426		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3427		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3428		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3429		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3430		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C3431		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3443		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3444		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3445		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3447		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C3448		ECUM1H151JCN	C.CAPACITOR CH 50V 150P	1	
C3449		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3450,51		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C3452		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3472		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3473		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3474		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3475-77		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3501		ECA0JM471	E.CAPACITOR 6.3V 470U	1	
C3502		ECRHA030E54	TRIMMER CAPACITOR	1	
C3503		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3504		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C3505		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3506		ECWM1H682JZ	F.CAPACITOR 50V 6800P	1	
C3507		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3508		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3509		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	1	
C3510		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3511		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3512		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3513		ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C3514,15		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3516,17		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C3518		ECEA1HKAR47	E.CAPACITOR 50V 0.47U	1	
C3519		ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1	
C3520		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C3521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3522		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C3523		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3524		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3525-27		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C3528		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3529		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3530		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3531		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3532		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3533		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C3534		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3601		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3602		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C3603		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3604		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C3605		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3606		ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1	
C3607		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3608		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3609		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C3610		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3611		ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	
C3613		ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C3614		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3901-05		ECEA1CKA100	E.CAPACITOR 16V 10U	5	
C3906		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3907		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3908		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3909,10		ECA1AM471	E.CAPACITOR 10V 470U	2	
C3911		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C3912		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C3913		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3914		ECEA1EK3R3	E.CAPACITOR 25V 3.3U	1	
C3915		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3916		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3917		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3918		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C3919		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3922		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3923		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3924		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3927		ECEA1CKA470	E.CAPACITOR 16V 47U	1	
C4001,02		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C4003,04		ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C4005		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4006		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4007		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4008		ECUM1C224ZFN	C.CAPACITOR CH 16V 0.22U	1	
C4009		ECEA1CPZ101	E.CAPACITOR 16V 100U	1	
C4010		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C4011,12		ECUM1H122KBN	C.CAPACITOR CH 50V 1200P	2	
C4501		ECWM1H152JZ	F.CAPACITOR 50V 1500P	1	
C4502		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4503		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4504,05		ECEA1CU470	E.CAPACITOR 16V 47U	2	
C4506		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4507		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4508		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4509		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4510		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4511		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4512		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4513		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4514		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4515		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4517		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4518		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4521		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4522		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4528		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4530		ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4533		ECEA1CU330	E.CAPACITOR 16V 33U	1	
C4537		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4538		ECEA1HUR47	E.CAPACITOR 50V 0.47U	1	
C4539		ECUM1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C4541		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4545		ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	
C4551		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4552		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4556		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4558		ECEA1EBZ4R7	E.CAPACITOR 25V 4.7U	1	
C4559		ECEA1AU470	E.CAPACITOR 10V 47U	1	
C4560		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4561		ECQB1H332JF	P.CAPACITOR 50V 3300P	1	
C4562		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4563		ECUX1H681JV	C.CAPACITOR CH 50V 680P	1	
C4564		ECUX1H561JV	C.CAPACITOR CH 50V 560P	1	
C4565		ECEA1EU4R7	E.CAPACITOR 25V 4.7U	1	
C4567		ECEA1AU101	E.CAPACITOR 10V 100U	1	
C4568		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4572		ECEA1HU3R3	E.CAPACITOR 50V 3.3U	1	
C4576		ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C4583		ECEA1CU330	E.CAPACITOR 16V 33U	1	
C4585,86		ECEA1AU101	E.CAPACITOR 10V 100U	2	
C4591		ECUX1C104ZFV	C.CAPACITOR CH 16V 0.1U	1	
C4592		ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C4593		ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C4594,95		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C4596		ECEA1CU100	E.CAPACITOR 16V 10U	1	
C4597		ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C4598		ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C4604		ECUM1H182JN	C.CAPACITOR CH 50V 1800P	1	
C4606		ECEA0JU470	E.CAPACITOR 6.3V 47U	1	
C4611		ECWM1H182JZ	F.CAPACITOR 50V 1800P	1	
C4613		ECUX1H821JCV	C.CAPACITOR CH 50V 820P	1	
C4616		ECUX1H102ZFV	C.CAPACITOR CH 50V 1000P	1	
C4617		ECEA10M22	E.CAPACITOR 10V 22U	1	
C4618		ECWM1H822JZ	F.CAPACITOR 50V 8200P	1	
C4621		ECEA0JU101	E.CAPACITOR 6.3V 100U	1	
C4629		ECQB1H562JZ	P.CAPACITOR 50V 5600P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C4636		ECUX1H471JV	C.CAPACITOR CH 50V 470P	1	
C4638		ECWM1H822JZ	F.CAPACITOR 50V 8200P	1	
C4652,53		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	
C4701		ECCD2H181J	C.CAPACITOR 500V 180P	1	
C4702		ECQP1222JZ	P.CAPACITOR 100V 2200P	1	
C4703		ECQB1H102JF	P.CAPACITOR 50V 1000P	1	
C4704		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C4705		ECEA16M33	E.CAPACITOR 16V 33U	1	
C4706		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C4707		ECQB1H223JF	P.CAPACITOR 50V 0.022U	1	
C4708		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C4709		ECQB1H472JF	P.CAPACITOR 50V 4700P	1	
C4710		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C4711,12		ECEA1AKA220	E.CAPACITOR 10V 22U	2	
C4713		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C4714		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C4901,02		ECWM1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4903,04		ECWM1H332JZ	F.CAPACITOR 50V 3300P	2	
C4905,06		VCEA1CAD100	E.CAPACITOR 16V 10U	2	
C4907,08		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4909,10		ECWM1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4911,12		ECWM1H332JZ	F.CAPACITOR 50V 3300P	2	
C4913,14		VCEA1CAD100	E.CAPACITOR 16V 10U	2	
C4915,16		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C4917,18		ECWM1H103JZ	F.CAPACITOR 50V 0.01U	2	
C4919,20		ECWM1H332JZ	F.CAPACITOR 50V 3300P	2	
C4923,24		VCEA0JAC101	E.CAPACITOR 6.3V 100U	2	
C6001		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6002		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C6003		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6004		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6005		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6006		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6007,08		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	2	
C6009		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6010		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6011		ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
C6012		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6013		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6014		ECQB1H103JF	P.CAPACITOR 50V 0.01U	1	
C6015		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6016,17		ECEA1HKN3R3	E.CAPACITOR 50V 3.3U	2	
C6018		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6019		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6020		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6021		ECEA16M10	E.CAPACITOR 16V 1U	1	
C6022		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C6023		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6024		ECEA1HKA4R7	E.CAPACITOR 50V 4.7U	1	
C6025		ECUM1H392KBN	C.CAPACITOR CH 50V 3900P	1	
C6026		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C6027		ECUM1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C6028		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C6029		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C6030		EECS5R5T224N	E.CAPACITOR 5.5V 0.22U	1	
C6034		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6035		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C6036		ECEA0JKA330	E.CAPACITOR 6.3V 33U	1	
C6037		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6038		ECEA1AKA470	E.CAPACITOR 10V 47U	1	
C6040		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6041		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C6042		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6043		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C6045		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C6046		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6049		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C6050,51		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	2	
C6053-56		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C6062		ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C6063		ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	
C7201		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7202		ECQV1H474JM	P.CAPACITOR 50V 0.47U	1	
C7203		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C7401		ECA1CM471	E.CAPACITOR 16V 470U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7402,03		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7404		ECA1CM101	E.CAPACITOR 16V 100U	1	
C7405,06		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7407,08		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7409		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C7410		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
C7651		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7653		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C7654		ECQB1H103JH	P.CAPACITOR 50V 0.01U	1	
C7655,56		ECEA1HK010	E.CAPACITOR 50V 1U	2	
C7657		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7658		ECQP1H562JZ	P.CAPACITOR 50V 5600P	1	
C7659		ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7661		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7662		ECQV1H683JM	P.CAPACITOR 50V 0.068U	1	
C7663		ECQV1H823JM	P.CAPACITOR 50V 0.082U	1	
C7664		ECQB1H273JH	P.CAPACITOR 50V 0.027U	1	
C7665,66		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7667		ECEA1HKA100	E.CAPACITOR 50V 10U	1	
C7670		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C7675		ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C7676,77		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7680		ECEA1HK010	E.CAPACITOR 50V 1U	1	
C7681,82		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C7901-03		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C7904		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7905		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7906		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7907		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7908		ECQV1H104JM	P.CAPACITOR 50V 0.1U	1	
C7909		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7910		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7911-13		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	3	
C7914		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7915		ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C7916		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7917		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7918		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7919		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C7920		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7921		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7922		ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7923		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7924		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7925		ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C7926		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7927		ECQB1H102JH	P.CAPACITOR 50V 1000P	1	
C7928		ECQB1H272JH	P.CAPACITOR 50V 2700P	1	
C7929		ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C7930		ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C7931		ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C7932,33		ECEA1CKN100	E.CAPACITOR 16V 10U	2	
C7934		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7935		ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C7937		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7938		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7939,40		ECEA1HKN0R1	E.CAPACITOR 50V 0.1U	2	
C7941		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7942		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7943		ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C7945		ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C7946		ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C7947		ECEA1HKR47	E.CAPACITOR 50V 0.47U	1	
C7948		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7949		ECEA0JK330	E.CAPACITOR 6.3V 33U	1	
C7950-53		ECEA1CKN100	E.CAPACITOR 16V 10U	4	
C7954		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C7955-58		ECEA1CK100	E.CAPACITOR 16V 10U	4	
C7960		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7961		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7963		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	1	
C7964		ECEA1CK100	E.CAPACITOR 16V 10U	1	
C7965,66		ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C7967		ECEA1CK100	E.CAPACITOR 16V 10U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D301		1SS283	DIODE	1	<R>
D303		MA151WK	DIODE	1	<R>
D305		1SS254	DIODE	1	<R>
D306		MA723VT	DIODE	1	<R>
D307		1SS254	DIODE	1	<R>
D308,09		MA151WK	DIODE	2	<R>
D710		MA3100L	DIODE	1	<R>
D771		MA151WK	DIODE	1	<R>
D772		MA165VT	DIODE	1	<R>
D801-07		1SS254	DIODE	7	<R>
D808		MA151WK	DIODE	1	<R>
D2001-05		1SS254	DIODE	5	<R>
D2501-08		1SS254	DIODE	8	<R>
D2510		1SS254	DIODE	1	<R>
D3002		MA28W-A	DIODE	1	<R>
D3003		1SS254	DIODE	1	<R>
D3301		1SS254	DIODE	1	<R>
D3302		MA151K	DIODE	1	<R>
D3304		MA151K	DIODE	1	<R>
D3403		MA723VT	DIODE	1	<R>
D3408		1SS254	DIODE	1	<R>
D3501		1SS254	DIODE	1	<R>
D3502		MA153	DIODE	1	<R>
D3504		MA151WK	DIODE	1	<R>
D3901		1SS254	DIODE	1	<R>
D3902		MA4130L	DIODE	1	<R>
D3903		1SS254	DIODE	1	<R>
D3904		MA151WK	DIODE	1	<R>
D3906		MA151WA	DIODE	1	<R>
D3908,09		1SS254	DIODE	2	<R>
D4003		MA723VT	DIODE	1	<R>
D4004		1SS254	DIODE	1	<R>
D4501-04		MA141K	DIODE	4	<R>
D4601,02		MA141K	DIODE	2	<R>
D4701,02		1SS254	DIODE	2	<R>
D6001		1SS254	DIODE	1	<R>
D6002		MA723VT	DIODE	1	<R>
D6003		1SS254	DIODE	1	<R>
D6005		MA151WK	DIODE	1	<R>
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D6007		MA151WK	DIODE	1	<R>
D6008		MA151WA	DIODE	1	<R>
D6009		11EQS04	DIODE	1	<R>
D6011,12		11EQS04	DIODE	2	<R>
D6013		MA723VT	DIODE	1	<R>
D6014		1SS254	DIODE	1	<R>
D6015		MA723VT	DIODE	1	<R>
D7202-04		1SS254	DIODE	3	<R>
D7401		MA723VT	DIODE	1	<R>
D7601		MA151WK	DIODE	1	<R>
D7602		MA3082M	DIODE	1	<R>
D7901,02		MA141WK	DIODE	2	<R>
D7904		MA141K	DIODE	1	<R>
D7905		MA141WA	DIODE	1	<R>
D7906		MA141WK	DIODE	1	<R>
D7907		MA141K	DIODE	1	<R>
DL801		EFDUN124A13N	DELAY	1	
DL802		EFDVR645A45A	DELAY	1	
DL803		VLD0147	DELAY	1	
FL301		ELB4M022	FILTER	1	
FL302		VLF0639	FILTER	1	
FL801		VLF1079	FILTER	1	
FL3601		ELB4R031	FILTER	1	
FL3901		VLF1120	FILTER	1	
FL3902		VLF0765	FILTER	1	
FL7901		VLF0702	FILTER	1	
FL7902		ELKAW103EB	FILTER	1	
FL7903		ELKAW101GB	FILTER	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
FL7904,05		ELKAW103EB	FILTER	2	
FL7907-11		ELKAW103EB	FILTER	5	
FL7914,15		ELKAW101GB	FILTER	2	
FL7916		VLF0633	FILTER	1	
IC301		VEFH20B	IC	1	<R>
IC302		MN3859S	IC	1	<R>
IC303		AN1358S	IC	1	<R>
IC701		M52014SP	IC	1	<R>
IC801		VCR0383	IC	1	<R>
IC802		M52352FP	IC	1	<R>
IC2001		AN3727S	IC	1	<R>
IC2002		UPD4053BG	IC	1	<R>
IC2501		BA6219B	IC	1	<R>
IC2502		LM358PS	IC	1	<R>
IC2503		XRA6439S	IC	1	<R>
IC2504		LM358PS	IC	1	<R>
IC2505		LM393P	IC	1	<R>
IC3001		AN3581S	IC	1	<R>
IC3002		M52055FP	IC	1	<R>
IC3301		M52083FP	IC	1	<R>
IC3401		NJM2233BMA	IC	1	<R>
IC3403		MN155202VZAM	IC	1	<R>
IC3404		MN1280S	IC	1	<R>
IC3405		UPD4066BG	IC	1	<R>
IC3501		LC74760	IC	1	<R>
IC3502		M52055FP	IC	1	<R>
IC3503		NJM2246DA	IC	1	<R>
IC3504		NJM2233BMA	IC	1	<R>
IC3601		AN6308S	IC	1	<R>
IC3901		M52475AP	IC	1	<R>
IC3902		AN3916	IC	1	<R>
IC3904		AN1393S	IC	1	<R>
IC4001		NJM4565DD	IC	1	<R>
IC4501		XLH7773AKS	IC	1	<R>
IC4601		BA7755AF	IC	1	<R>
IC4701		AN1358S	IC	1	<R>
IC4702		MN4066BS	IC	1	<R>
IC4901		LA7155M	IC	1	<R>
IC6001		MN6755320H3W	IC	1	<R>
IC6002		M38024V1BN	IC	1	<R>
IC6003		MN1280S	IC	1	<R>
IC6005		UPD4052BG	IC	1	<R>
IC6007		M6M80041P	IC	1	<R>
IC6008		TL431CLP	IC	1	<R>
IC7201		UPD4011BC	IC	1	<R>
IC7401		M66006FP	IC	1	<R>
IC7651		AN5421	IC	1	<R>
IC7652		AN5043	IC	1	<R>
IC7653		MN4066BS	IC	1	<R>
IC7901		TB1204F	IC	1	<R>
IC7902		TA2009F	IC	1	<R>
IC7903		M5238FP	IC	1	<R>
J3901,02		VJS1470	CONNECTOR (FEMALE)	2	
K2		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K4		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K6		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K101		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K101		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K102		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
K113		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K115		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K118-20		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
K128		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
K129		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K130,31		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	2	
K132,33		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
K134		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
K135,36		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K138		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K205-07		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
K3003		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3010		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K3909		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K4901,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K6003-05		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
K6016		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7405		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7409,10		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K7417		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L302		VLQ0188J180	COIL 18UH	1	
L304		VLQ0188J270	COIL 27UH	1	
L305		VLQ0188J101	COIL 100UH	1	
L306		VLQ0188J390	COIL 39UH	1	
L309-11		VLQ0188J330	COIL 33UH	3	
L312		ELESN121JA	COIL 120UH	1	
L312		VLQ0407101K	COIL 100UH	1	
L701		ELESQ680KA	COIL 68UH	1	
L713		VLQ0213K1R2	COIL 1.2UH	1	
L714		ELQT1R2KB	COIL 1.2UH	1	
L718		ELESQ680KA	COIL 68UH	1	
L719		ELESQ8R2KA	COIL 8.2UH	1	
L801,02		ELESE681KA	COIL 680UH	2	
L803		ELESN331KA	COIL 330UH	1	
L804		VLQ0407101K	COIL 100UH	1	
L806		VLQ0407101K	COIL 100UH	1	
L807,08		VLQ0188J150	COIL 15UH	2	
L809		VLQ0188J330	COIL 33UH	1	
L810		VLQ0188J150	COIL 15UH	1	
L811		VLQ0188J151	COIL 150UH	1	
L812		VLQ0188J270	COIL 27UH	1	
L813,14		VLQ0188J150	COIL 15UH	2	
L2001		VLQ0569	COIL	1	
L2002		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L2501		VLP0074	COIL	1	
L2502		ELESN330KA	COIL 33UH	1	
L2503		ELESE102KA	COIL 1000UH	1	
L3001-03		VLQ0188J330	COIL 33UH	3	
L3004		VLQ0398	COIL	1	
L3005-08		VLQ0556	COIL	4	
L3301		VLQ0188J150	COIL 15UH	1	
L3304		VLQ0188J330	COIL 33UH	1	
L3306		VLQ0188J390	COIL 39UH	1	
L3307		VLQ0188J120	COIL 12UH	1	
L3308		VLQ0188J330	COIL 33UH	1	
L3309		VLQ0188J181	COIL 180UH	1	
L3310		VLQ0188J270	COIL 27UH	1	
L3313		ELESE681KA	COIL 680UH	1	
L3315,16		VLQ0188J5R6	COIL 5.6UH	2	
L3318		VLQ0188J330	COIL 33UH	1	
L3323		VLQ0188J330	COIL 33UH	1	
L3401		VLQ0188J150	COIL 15UH	1	
L3404		VLQ0188J220	COIL 22UH	1	
L3405		VLQ0188J330	COIL 33UH	1	
L3412		VLQ0188J330	COIL 33UH	1	
L3415		VLQ0188J120	COIL 12UH	1	
L3501		VLQ0188J330	COIL 33UH	1	
L3502		VLQ0188J5R6	COIL 5.6UH	1	
L3503		VLQ0188J100	COIL 10UH	1	
L3504		VLQ0188J390	COIL 39UH	1	
L3505		VLQ0188J820	COIL 82UH	1	
L3508		VLQ0188J330	COIL 33UH	1	
L3601		VLQEL05S120K	COIL 12UH	1	
L3602,03		VLQEL05S101K	COIL 100UH	2	
L3604		VLQEL05S151K	COIL 150UH	1	
L3605		VLQEL05S820K	COIL 82UH	1	
L3901-04		ELESE101KA	COIL 100UH	4	
L4001,02		ELESE101KA	COIL 100UH	2	
L4501,02		ELESE101KA	COIL 100UH	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
L4601		VLQEL07F153J	COIL 15UH	1	
L4701		ELESE471KA	COIL 470UH	1	
L4702		ELESE101KA	COIL 100UH	1	
L4901,02		ELESE102KA	COIL 1000UH	2	
L4903,04		ELESE101KA	COIL 100UH	2	
L4905,06		ELESE102KA	COIL 1000UH	2	
L4907,08		ELESE101KA	COIL 100UH	2	
L4909,10		ELESE102KA	COIL 1000UH	2	
L6001		VLP0083	COIL	1	
L6002		ELESE101KA	COIL 100UH	1	
L6003		VLP0083	COIL	1	
L6007,08		VLP0083	COIL	2	
L6009		ELESE101KA	COIL 100UH	1	
L7402,03		VLQ0188J330	COIL 33UH	2	
L7404		VLQ0540J330	COIL 33UH	1	
L7405		VLQ0188J1R0	COIL 1UH	1	
L7901,02		VLP0083	COIL	2	
P1001		VJP2593	CONNECTOR (MALE)	1	
P1001		VJS2593	CONNECTOR (FEMALE)	1	
P1002		VJP1142	CONNECTOR (MALE)	1	
P1002		VJS1142	CONNECTOR (FEMALE)	1	
P1102		VJS1932	CONNECTOR (FEMALE)	1	
P1103		VJS1142	CONNECTOR (FEMALE)	1	
P1509		VJS1141	CONNECTOR (FEMALE)	1	
P2001		VJP1232T	CONNECTOR (MALE)	1	
P2001		VJS1738T	CONNECTOR (FEMALE)	1	
P2003		VJP3502	CONNECTOR (MALE)	1	
P2003		VJS3482	CONNECTOR (FEMALE)	1	
P2004		VJS3537A015G	CONNECTOR (FEMALE)	1	
P2902		VJS1738T	CONNECTOR (FEMALE)	1	
P3001		VJS3537A020G	CONNECTOR (FEMALE)	1	
P3002		VJP3233A010	CONNECTOR (MALE)	1	
P3002		VJS3366Z010	CONNECTOR (FEMALE)	1	
P3003		VJF0171	CONNECTOR	1	
P3003		VJP1393T	CONNECTOR (MALE)	1	
P3004		VJF0171T	CONNECTOR	1	
P3004		VJP1393T	CONNECTOR (MALE)	1	
P3801		VJF0171T	CONNECTOR	1	
P4001		VJS2331	CONNECTOR (FEMALE)	1	
P4002		VJP1238T	CONNECTOR (MALE)	1	
P4002		VJS1744T	CONNECTOR (FEMALE)	1	
P4003		VJP1230T	CONNECTOR (MALE)	1	
P4003		VJS1230	CONNECTOR (FEMALE)	1	
P6001		VJS3537A014G	CONNECTOR (FEMALE)	1	
P6003		VJP1233T	CONNECTOR (MALE)	1	
P6003		VJS1739T	CONNECTOR (FEMALE)	1	
P6004		VJP1235T	CONNECTOR (MALE)	1	
P6004		VJS1741T	CONNECTOR (FEMALE)	1	
P6502		VJS1744T	CONNECTOR (FEMALE)	1	
P7201		VJP1245T	CONNECTOR (MALE)	1	
P7201		VJS1232T	CONNECTOR (FEMALE)	1	
P7401,02		VJS3537A020G	CONNECTOR (FEMALE)	2	
P7503		VJS3366Z010	CONNECTOR (FEMALE)	1	
P7504		VJS1739T	CONNECTOR (FEMALE)	1	
P9001		VJF0171	CONNECTOR	1	
P9002		VJS1741T	CONNECTOR (FEMALE)	1	
PP2001		VJP3042A012W	CONNECTOR (MALE)	1	
PP2002		VJP3042A010W	CONNECTOR (MALE)	1	
PP3001		VJP3042A009W	CONNECTOR (MALE)	1	
PP3002		VJP3042A012W	CONNECTOR (MALE)	1	
PP3003		VJP3042A013W	CONNECTOR (MALE)	1	
PP3011,12		VJP3042A018W	CONNECTOR (MALE)	2	
PP3013		VJP3042A014W	CONNECTOR (MALE)	1	
PP3021-24		VJP3043A012W	CONNECTOR (MALE)	4	
PP3301		VJP3042A011W	CONNECTOR (MALE)	1	
PP4001-03		VJP3186A018W	CONNECTOR (MALE)	3	
PP4501		VJP3042A017W	CONNECTOR (MALE)	1	
PP7401-03		VJP3043A005W	CONNECTOR (MALE)	3	
PP7404		VJP3043A006W	CONNECTOR (MALE)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
PP7405		VJP3043A004W	CONNECTOR (MALE)	1	
PS301		VJS3042B009W	CONNECTOR (FEMALE)	1	
PS302		VJS3042B012W	CONNECTOR (FEMALE)	1	
PS303		VJS3042B013W	CONNECTOR (FEMALE)	1	
PS701-03		VJS3043B005W	CONNECTOR (FEMALE)	3	
PS704		VJS3043B006W	CONNECTOR (FEMALE)	1	
PS2001		VJS3042B012W	CONNECTOR (FEMALE)	1	
PS2002		VJS3042B010W	CONNECTOR (FEMALE)	1	
PS3021-24		VJS3043B012W	CONNECTOR (FEMALE)	4	
PS3302,03		VJS3042B018W	CONNECTOR (FEMALE)	2	
PS3501		VJS3042F014W	CONNECTOR (FEMALE)	1	
PS3601		VJS3042B011W	CONNECTOR (FEMALE)	1	
PS4001-03		VJS3186B018	CONNECTOR (FEMALE)	3	
PS4701		VJS3042B017W	CONNECTOR (FEMALE)	1	
Q301		MSC2295	TRANSISTOR	1	<R>
Q302		MSB709	TRANSISTOR	1	<R>
Q303,04		MSC2295	TRANSISTOR	2	<R>
Q305		MSD601	TRANSISTOR	1	<R>
Q306		MSC2295	TRANSISTOR	1	<R>
Q307,08		MSB709	TRANSISTOR	2	<R>
Q703		MSD601-S	TRANSISTOR	1	<R>
Q711		MSB709-R	TRANSISTOR	1	<R>
Q712		2SD1996-R	TRANSISTOR	1	<R>
Q713		2SD1328-S	TRANSISTOR	1	<R>
Q771		MSD601	TRANSISTOR	1	<R>
Q772		MSD601-S	TRANSISTOR	1	<R>
Q801		2SA1022	TRANSISTOR	1	<R>
Q802		MSC2295	TRANSISTOR	1	<R>
Q803		MSB709	TRANSISTOR	1	<R>
Q2001,02		MSB709	TRANSISTOR	2	<R>
Q3001		MSD602	TRANSISTOR	1	<R>
Q3002		2SB1322	TRANSISTOR	1	<R>
Q3003		MSD601	TRANSISTOR	1	<R>
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Q3005,06		MSD601	TRANSISTOR	2	<R>
Q3301,02		MSC2295	TRANSISTOR	2	<R>
Q3304,05		MSD601	TRANSISTOR	2	<R>
Q3401,02		MSC2295	TRANSISTOR	2	<R>
Q3403		MSD601	TRANSISTOR	1	<R>
Q3404		MSC2295	TRANSISTOR	1	<R>
Q3405-07		MSD601	TRANSISTOR	3	<R>
Q3408		MSD602	TRANSISTOR	1	<R>
Q3409		MSB710	TRANSISTOR	1	<R>
Q3410-12		MSD601	TRANSISTOR	3	<R>
Q3422		MSD1328	TRANSISTOR	1	<R>
Q3423		MSD601	TRANSISTOR	1	<R>
Q3424		MSB710	TRANSISTOR	1	<R>
Q3425		MSC2295	TRANSISTOR	1	<R>
Q3426,27		MSD601	TRANSISTOR	2	<R>
Q3501		MSD601	TRANSISTOR	1	<R>
Q3502		MSB709	TRANSISTOR	1	<R>
Q3601		MSD601	TRANSISTOR	1	<R>
Q3602,03		MSC2295	TRANSISTOR	2	<R>
Q3604		MSB709	TRANSISTOR	1	<R>
Q3901,02		2SD1991A	TRANSISTOR	2	<R>
Q3903		MSD1328	TRANSISTOR	1	<R>
Q3904		MSD601	TRANSISTOR	1	<R>
Q3905		MSC2295	TRANSISTOR	1	<R>
Q3906		MSB709	TRANSISTOR	1	<R>
Q3907		MSD601	TRANSISTOR	1	<R>
Q3912		2SD1996	TRANSISTOR	1	<R>
Q3913-15		MSD601	TRANSISTOR	3	<R>
Q3916		MSB710	TRANSISTOR	1	<R>
Q3917		MSD602	TRANSISTOR	1	<R>
Q3918		MSB710	TRANSISTOR	1	<R>
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Q4601,02		2SD1819A	TRANSISTOR	2	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
Q4701		2SD602A-R	TRANSISTOR	1	<R>
Q4702,03		MSD601	TRANSISTOR	2	<R>
Q4704,05		MSB710	TRANSISTOR	2	<R>
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Q4708		2SB1378	TRANSISTOR	1	<R>
Q6001		2SD1991A	TRANSISTOR	1	<R>
Q6002		MSB709	TRANSISTOR	1	<R>
Q6003		2SD1915F	TRANSISTOR	1	<R>
Q6004-06		MSD601	TRANSISTOR	3	<R>
Q6008		2SD1991	TRANSISTOR	1	<R>
Q7901,02		MSD601	TRANSISTOR	2	<R>
Q7903		2SC3931-C	TRANSISTOR	1	<R>
Q7904-07		2SB1219	TRANSISTOR	4	<R>
Q7908,09		2SC3929	TRANSISTOR	2	<R>
Q7910		2SD1820	TRANSISTOR	1	<R>
Q7913		2SB1218-Q	TRANSISTOR	1	<R>
Q7914,15		2SD1979-S	TRANSISTOR	2	<R>
Q7916		2SB1219	TRANSISTOR	1	<R>
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QR3406-08		XN1212	TRANSISTOR-RESISTOR	3	<R>
QR3409,10		MRN1403	TRANSISTOR-RESISTOR	2	<R>
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QR3901-03		MRN1404	TRANSISTOR-RESISTOR	3	<R>
QR3904,05		MRN1402	TRANSISTOR-RESISTOR	2	<R>
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QR4001		MRN1403	TRANSISTOR-RESISTOR	1	<R>
QR4002,03		DTC363EK	TRANSISTOR-RESISTOR	2	<R>
QR4004,05		MRN1404	TRANSISTOR-RESISTOR	2	<R>
QR4508,09		UN5113	TRANSISTOR-RESISTOR	2	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR4510		UN5212	TRANSISTOR-RESISTOR	1	<R>
QR4602		UN5111	TRANSISTOR-RESISTOR	1	<R>
QR4603		UN5213	TRANSISTOR-RESISTOR	1	<R>
QR4701-03		MRN1403	TRANSISTOR-RESISTOR	3	<R>
QR4704		MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR6001		MRN1402	TRANSISTOR-RESISTOR	1	<R>
QR6002,03		MRN2402	TRANSISTOR-RESISTOR	2	<R>
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QR6009		XN1213	TRANSISTOR-RESISTOR	1	<R>
QR6012		MRN1404	TRANSISTOR-RESISTOR	1	<R>
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QR7601		MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR7901,02		UN5213	TRANSISTOR-RESISTOR	2	<R>
QR7903		UN5112	TRANSISTOR-RESISTOR	1	<R>
QR7904		UN5214	TRANSISTOR-RESISTOR	1	<R>
QR7905,06		UN5213	TRANSISTOR-RESISTOR	2	<R>
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R301		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R303		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R304		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R305,06		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
R307		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R308		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R309		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R310		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R311		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R312		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R313		ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R314		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R315		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R316		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R317		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R318		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	1	
R319		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R320		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R321		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R322		ERJ6GMYG123	M.RESISTOR CH1/10W 12K	1	
R323		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R324		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R325		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R326		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R327		ERJ6GMYG432	M.RESISTOR CH1/10W 4.3K	1	
R328		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R329		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R330		ERJ6GMYG432	M.RESISTOR CH1/10W 4.3K	1	
R331		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R332		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R333		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R334		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R335		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R336		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R337		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R338,39		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R340		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R341		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R342		ERJ6GMYJ181	M.RESISTOR CH1/10W 180	1	
R343		ERJ6GMYJ273	M.RESISTOR CH1/10W 27K	1	
R344		ERJ6GMYJ911	M.RESISTOR CH1/10W 910	1	
R345		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R346		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R347		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R348		ERJ6GMYJ273	M.RESISTOR CH1/10W 27K	1	
R349		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R350		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R351		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R352		ERJ6GMYG183	M.RESISTOR CH1/10W 18K	1	
R353		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R354		ERJ6GMYG753	M.RESISTOR CH1/10W 75K	1	
R355		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R356		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R357		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R358		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R359		ERJ6GMYJ181	M.RESISTOR CH1/10W 180	1	
R360,61		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R716		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R719		ERJ6GEYJ105	M.RESISTOR CH1/10W 1M	1	
R720		ERJ6GEYJ682	M.RESISTOR CH1/10W 6.8K	1	
R721		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	1	
R724		ERJ6GEYJ822	M.RESISTOR CH1/10W 8.2K	1	
R725		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R727		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	1	
R728		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R729		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	1	
R730		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R736		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	1	
R737		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R738		ERJ6GEYJ562	M.RESISTOR CH1/10W 5.6K	1	
R739		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	1	
R740		ERJ6GEYJ394	M.RESISTOR CH1/10W 390K	1	
R741		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R742		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R743		ERJ6GEYJ474	M.RESISTOR CH1/10W 470K	1	
R744		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R745		ERJ6GEYG181	M.RESISTOR CH1/10W 180	1	
R746		ERDS2TJ151	C.RESISTOR 1/4W 150	1	
R750		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R757,58		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	2	
R759		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R763		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
R772		ERJ6GEYJ271	M.RESISTOR CH1/10W 270	1	
R773		ERJ6GEYJ472	M.RESISTOR CH1/10W 4.7K	1	
R774		ERJ6GEYJ562	M.RESISTOR CH1/10W 5.6K	1	
R779		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R781		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R790		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R791		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R798		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R802		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R803		ERJ6GMYG242	M.RESISTOR CH1/10W 2.4K	1	
R804,05		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R809		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R810,11		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R814		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R815		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R816		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R817		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R818		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R820		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R821,22		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R824		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R825		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R826		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	1	
R827		ERJ6GMYJ154	M.RESISTOR CH1/10W 150K	1	
R828		ERJ6GMYJ204	M.RESISTOR CH1/10W 200K	1	
R829		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R830		ERJ6GMYJ154	M.RESISTOR CH1/10W 150K	1	
R831		ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	1	
R832		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R833		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R834		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R835,36		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	2	
R837		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R838,39		ERJ6GMYJ681	M.RESISTOR CH1/10W 680	2	
R840		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R841		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R842,43		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	2	
R844		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R845		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R846		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R847		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R848		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R849		ERJ6GMYK395	M.RESISTOR CH1/10W 3.9M	1	
R850		ERJ6GMYJ302	M.RESISTOR CH1/10W 3K	1	
R851,52		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R853		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R1001		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R2004		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R2005		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R2011		ERJ6GMYG222	M.RESISTOR CH1/10W 2.2K	1	
R2012		ERJ6GMYG392	M.RESISTOR CH1/10W 3.9K	1	
R2013,14		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	2	
R2015		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R2016		ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R2018		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R2019		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R2501		ERX1SJ1R8	M.RESISTOR 1W 1.8	1	
R2502		ERJ6GMYG112	M.RESISTOR CH1/10W 1.1K	1	
R2503		ERJ6GMYG102	M.RESISTOR CH1/10W 1K	1	
R2504		ERJ6GMYG332	M.RESISTOR CH1/10W 3.3K	1	
R2505		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R2506		ERJ6GMYJ564	M.RESISTOR CH1/10W 560K	1	
R2507		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R2508		VRE0034E512	M.RESISTOR CH 1/10W 5.1K	1	
R2509		VRE0034E472	M.RESISTOR CH 1/10W 4.7K	1	
R2510		ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R2511		ERJ6GMYJ684	M.RESISTOR CH1/10W 680K	1	
R2513		ERJ6GMYG133	M.RESISTOR CH1/10W 13K	1	
R2514		ERJ6GMYG821	M.RESISTOR CH1/10W 820	1	
R2515		ERG12SJ561	M.RESISTOR 1/2W 560	1	
R2516		ERJ6GMYG473	M.RESISTOR CH1/10W 47K	1	
R2517		ERX12SJR47	M.RESISTOR 1/2W 0.47	1	
R2518		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R2519		ERJ6GMYG432	M.RESISTOR CH1/10W 4.3K	1	
R2520		ERJ6GMYG103	M.RESISTOR CH1/10W 10K	1	
R2521-23		ERDS2TJ560	C.RESISTOR 1/4W 56	3	
R2524		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R2525		EROS2CKG6800	M.RESISTOR 1/4W 680	1	
R2526		ERJ6GMYJ392	M.RESISTOR CH1/10W 3.9K	1	
R2527		ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R2528		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R2529		ERJ6GMYJ392	M.RESISTOR CH1/10W 3.9K	1	
R2530		ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R2531,32		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	2	
R2533		ERJ6GMYJ393	M.RESISTOR CH1/10W 39K	1	
R2534		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R2535		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R2536		ERJ6GMYJ824	M.RESISTOR CH1/10W 820K	1	
R2537		ERJ6GMYJ393	M.RESISTOR CH1/10W 39K	1	
R2538		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R2539		ERJ6GMYJ681	M.RESISTOR CH1/10W 680	1	
R2540		ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R2541		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R3001,02		ERJ6GMYJ750	M.RESISTOR CH1/10W 75	2	
R3003		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R3004		ERJ6GMYJ683	M.RESISTOR CH1/10W 68K	1	
R3005		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3006,07		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R3008		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3009		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3010		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3011		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3012		ERJ6GMYG911	M.RESISTOR CH1/10W 910	1	
R3013		ERJ6GMYG102	M.RESISTOR CH1/10W 1K	1	
R3014		ERJ6GMYG471	M.RESISTOR CH1/10W 470	1	
R3015		ERJ6GMYG102	M.RESISTOR CH1/10W 1K	1	
R3016		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3017		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3018		ERJ6GMYJ392	M.RESISTOR CH1/10W 3.9K	1	
R3019		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3021		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3022		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R3023		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
R3024		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	1	
R3025		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
R3026,27		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R3301		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3302		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R3303		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3304		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3305		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3306		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3307		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3308		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3310		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3322		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R3323		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R3324		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3325,26		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R3327		ERJ6GMYJ821	M.RESISTOR CH1/10W 820	1	
R3328		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3333		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3334		ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R3335		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3336,37		ERJ6GMYJ681	M.RESISTOR CH1/10W 680	2	
R3338		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3339		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3340		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3341		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R3342		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R3345,46		ERJ6GMYJ821	M.RESISTOR CH1/10W 820	2	
R3347		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R3352		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3353		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3401		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3402		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R3403		ERJ6GMYG361	M.RESISTOR CH 1/10W 360	1	
R3404		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3405		ERJ6GMYG123	M.RESISTOR CH1/10W 12K	1	
R3406		ERJ6GMYG512	M.RESISTOR CH1/10W 5.1K	1	
R3407		ERJ6GMYG272	M.RESISTOR CH1/10W 2.7K	1	
R3408		ERJ6GMYG302	M.RESISTOR CH1/10W 3K	1	
R3409		ERJ6GMYG821	M.RESISTOR CH1/10W 820	1	
R3410		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3411-13		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	3	
R3415		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3417		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3422		ERJ6GMYG333	M.RESISTOR CH1/10W 33K	1	
R3423		ERJ6GMYG683	M.RESISTOR CH1/10W 68K	1	
R3424		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3425		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R3426		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R3427		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3428		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R3429		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3430		ERJ6GMYJ823	M.RESISTOR CH1/10W 82K	1	
R3431		ERJ6GMYG821	M.RESISTOR CH1/10W 820	1	
R3433		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3434		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R3435		ERJ6GMYG302	M.RESISTOR CH1/10W 3K	1	
R3436		ERJ6GMYG272	M.RESISTOR CH1/10W 2.7K	1	
R3437		ERJ6GMYG512	M.RESISTOR CH1/10W 5.1K	1	
R3438		ERJ6GMYG123	M.RESISTOR CH1/10W 12K	1	
R3441		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R3442		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3443		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R3444,45		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	2	
R3446,47		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R3463		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3464		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3465		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R3466		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3467		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R3468,69		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	2	
R3470		ERJ6GMYG123	M.RESISTOR CH1/10W 12K	1	
R3471		ERJ6GMYG512	M.RESISTOR CH1/10W 5.1K	1	
R3472		ERJ6GMYG272	M.RESISTOR CH1/10W 2.7K	1	
R3473		ERJ6GMYG302	M.RESISTOR CH1/10W 3K	1	
R3474		ERJ6GMYG821	M.RESISTOR CH1/10W 820	1	
R3475		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3476		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3477,78		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R3479		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3501		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3502		ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R3503		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3504,05		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R3506		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R3507		ERJ6GMYG103	M.RESISTOR CH1/10W 10K	1	
R3508		ERJ6GMYG332	M.RESISTOR CH1/10W 3.3K	1	
R3509-11		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	3	
R3513,14		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	2	
R3515		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R3516		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3517		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3518		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3519		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3520		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3521		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R3522		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3523		ERJ6GMYJ122	M.RESISTOR CH1/10W 1.2K	1	
R3524		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3525		ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R3526		ERJ6GMYJ470	M.RESISTOR CH1/10W 47	1	
R3601		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3602		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3603		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R3604		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3605		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R3606		ERJ6GMYJ821	M.RESISTOR CH1/10W 820	1	
R3607-12		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	6	
R3613		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R3614		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3616		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R3901-05		ERJ6GMYJ750	M.RESISTOR CH1/10W 75	5	
R3906		ERDS1TJ750	C.RESISTOR 1/2W 75	1	
R3908,09		ERJ6GMYJ750	M.RESISTOR CH1/10W 75	2	
R3910,11		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	2	
R3912,13		ERJ6GMYJ151	M.RESISTOR CH1/10W 150	2	
R3914		ERJ6GMYJ750	M.RESISTOR CH1/10W 75	1	
R3915		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3916,17		ERDS2TJ181	C.RESISTOR 1/4W 180	2	
R3926		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3927,28		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R3929		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R3930		ERJ6GMYJ112	M.RESISTOR CH1/10W 1.1K	1	
R3931		ERJ6GMYJ123	M.RESISTOR CH1/10W 12K	1	
R3932		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R3933		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R3934		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R3935		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R3936		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R3938		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R3945		ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R3946		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R3950,51		ERJ6GMYJ331	M.RESISTOR CH1/10W 330	2	
R3953		ERDS2TJ562	C.RESISTOR 1/4W 5.6K	1	
R3954		ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R3955		ERJ6GMYJ123	M.RESISTOR CH1/10W 12K	1	
R3956		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R3957-60		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	4	
R3961		ERJ6GMYJ750	M.RESISTOR CH1/10W 75	1	
R3962		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R3963		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R3964		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R3965		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R3966		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R3967		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R3968		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4001,02		ERDS2TJ680	C.RESISTOR 1/4W 68	2	
R4003-08		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	6	
R4009		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R4010		ERJ6GMYG433	M.RESISTOR CH1/10W 43K	1	
R4011		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R4012		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R4013		ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R4014		ERJ6GMYG100	M.RESISTOR CH1/10W 10	1	
R4015		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R4020		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R4021		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R4022		ERJ6GMYJ273	M.RESISTOR CH1/10W 27K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4028		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R4029,30		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R4033		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4034		ERJ6GMYG393	M.RESISTOR CH1/10W 39K	1	
R4035		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R4036		ERJ6GMYG393	M.RESISTOR CH1/10W 39K	1	
R4501,02		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4503		ERJ3GEYG223	M.RESISTOR CH1/16W 22K	1	
R4504,05		ERJ3GEYJ393	M.RESISTOR CH1/16W 39K	2	
R4506,07		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	2	
R4508		ERJ3GEYG224	M.RESISTOR CH1/16W 220K	1	
R4509		ERJ3GEYJ622	M.RESISTOR CH 1/16W 6.2K	1	
R4511		ERJ3GEYG273	M.RESISTOR CH1/16W 27K	1	
R4512		VRE0071E163	M.RESISTOR 16K	1	
R4513		ERJ3GEYG103	M.RESISTOR CH1/16W 10K	1	
R4514,15		ERJ3GEYJ223	M.RESISTOR CH1/16W 22K	2	
R4518,19		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4522		ERJ3GEYJ225	M.RESISTOR CH1/16W 2.2M	1	
R4527		VRE0071E333	M.RESISTOR 33K	1	
R4528		VRE0071E153	M.RESISTOR 15K	1	
R4529		ERJ3GEYG562	M.RESISTOR CH1/16W 5.6K	1	
R4530		ERJ3GEYJ334	M.RESISTOR CH1/16W 330K	1	
R4534		ERJ3GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R4535		ERJ3GEYJ104	M.RESISTOR CH1/16W 100K	1	
R4539		ERJ3GEYJ104	M.RESISTOR CH1/16W 100K	1	
R4541		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R4542		ERJ3GEYJ222	M.RESISTOR CH1/16W 2.2K	1	
R4543		ERJ3GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R4551,52		ERJ3GEYJ393	M.RESISTOR CH1/16W 39K	2	
R4553,54		ERJ3GEYJ273	M.RESISTOR CH1/16W 27K	2	
R4558		ERJ3GEYG224	M.RESISTOR CH1/16W 220K	1	
R4561		ERJ3GEYG273	M.RESISTOR CH1/16W 27K	1	
R4562		VRE0034E10C	M.RESISTOR CH 1/10W 1	1	
R4563		ERJ3GEYG272	M.RESISTOR CH1/16W 2.7K	1	
R4568,69		ERJ3GEYJ273	M.RESISTOR CH1/16W 27K	2	
R4573		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R4577		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R4578		VRE0071E473	M.RESISTOR 47K	1	
R4581		ERJ3GEYJ104	M.RESISTOR CH1/16W 100K	1	
R4583		ERJ3GEYJ102	M.RESISTOR CH1/16W 1K	1	
R4584		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R4585		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4586		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R4587,88		ERJ3GEYJ273	M.RESISTOR CH1/16W 27K	2	
R4591		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R4592		ERJ3GEYJ563	M.RESISTOR CH1/16W 56K	1	
R4593		ERJ3GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R4594		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R4596		ERJ3GEYG473	M.RESISTOR CH1/16W 47K	1	
R4597		ERJ3GEYJ103	M.RESISTOR CH1/16W 10K	1	
R4598,99		ERJ3GEYG104	M.RESISTOR CH1/16W 100K	2	
R4603		ERJ3GEYG183	M.RESISTOR CH1/16W 18K	1	
R4606		ERJ3GEYJ562	M.RESISTOR CH1/16W 5.6K	1	
R4610		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R4611		ERJ3GEYJ101	M.RESISTOR CH1/16W 100	1	
R4612		ERJ3GEYJ331	M.RESISTOR CH1/16W 330	1	
R4613		ERJ3GEYJ394	M.RESISTOR CH1/16W 390K	1	
R4615		ERJ3GEYJ133	M.RESISTOR CH1/16W 13K	1	
R4616		ERJ3GEYJ105	M.RESISTOR CH1/16W 1M	1	
R4638		ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R4649		ERJ3GEYJ470	M.RESISTOR CH1/16W 47	1	
R4651		ERJ3GEYJ101	M.RESISTOR CH1/16W 100	1	
R4652		ERJ3GEYJ223	M.RESISTOR CH1/16W 22K	1	
R4653		ERJ3GEYJ221	M.RESISTOR CH1/16W 220	1	
R4654		ERJ3GEYJ223	M.RESISTOR CH1/16W 22K	1	
R4655		ERJ3GEYJ562	M.RESISTOR CH1/16W 5.6K	1	
R4656		ERJ3GEYG243	M.RESISTOR CH1/16W 24K	1	
R4657		ERJ3GEYJ392	M.RESISTOR CH1/16W 3.9K	1	
R4666		ERJ3GEYJ471	M.RESISTOR CH1/16W 470	1	
R4671		ERJ3GEYG103	M.RESISTOR CH1/16W 10K	1	
R4701		ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	1	
R4702		ERJ6GMYJ821	M.RESISTOR CH1/10W 820	1	
R4703		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R4704,05		ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	2	
R4706		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R4707		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R4708		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4709		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R4710		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4711		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R4712		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R4713		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4714		ERJ6GMYJ562	M.RESISTOR CH1/10W 5.6K	1	
R4715		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R4716		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R4717		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R4718		ERJ6GMYG753	M.RESISTOR CH1/10W 75K	1	
R4719		ERJ6GMYG203	M.RESISTOR CH1/10W 20K	1	
R4720,21		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	2	
R4722		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R4723		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R4724,25		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	2	
R4901,02		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	2	
R4903,04		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	2	
R4905,06		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	2	
R4907,08		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	2	
R4909,10		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R4915-18		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	4	
R4921		ERJ6GMYG163	M.RESISTOR CH1/10W 16K	1	
R4922,23		ERJ6GMYG433	M.RESISTOR CH1/10W 43K	2	
R4924		ERJ6GMYG163	M.RESISTOR CH1/10W 16K	1	
R4925		ERJ6GMYG473	M.RESISTOR CH1/10W 47K	1	
R4926		ERJ6GMYG223	M.RESISTOR CH1/10W 22K	1	
R4929		ERJ6GMYG223	M.RESISTOR CH1/10W 22K	1	
R4930		ERJ6GMYG473	M.RESISTOR CH1/10W 47K	1	
R6001		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6002,03		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	2	
R6004		EROS2CKG2000	M.RESISTOR 1/4W 200	1	
R6005		ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R6006		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6007-09		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	3	
R6010,11		ERJ6GMYG223	M.RESISTOR CH1/10W 22K	2	
R6012		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6013		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6015,16		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6017		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6018		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6019		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6020,21		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6022-24		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	3	
R6025		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	1	
R6027		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R6028		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6029		ERJ6GMYJ183	M.RESISTOR CH1/10W 18K	1	
R6030		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R6031		ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R6032,33		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	2	
R6034		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6035		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R6036		ERJ6GMYJ123	M.RESISTOR CH1/10W 12K	1	
R6037,38		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R6039,40		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	2	
R6041		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	1	
R6042		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R6044-49		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	6	
R6050		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6051		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R6052		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R6053		ERJ6GMYJ682	M.RESISTOR CH1/10W 6.8K	1	
R6054		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6055		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R6056,57		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	2	
R6058,59		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6060		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6061,62		ERJ6GMYJ683	M.RESISTOR CH1/10W 68K	2	
R6063		ERJ6GMYJ224	M.RESISTOR CH1/10W 220K	1	
R6064		ERJ6GMYJ104	M.RESISTOR CH1/10W 100K	1	
R6066		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6067		ERJ6GMYJ181	M.RESISTOR CH1/10W 180	1	
R6068-70		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	3	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R6071		ERDS2TJ391	C.RESISTOR 1/4W 390	1	
R6074		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R6075		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6076		ERJ6GMYJ563	M.RESISTOR CH 1/10W 56K	1	
R6077		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6078		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6079		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6081		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R6082		ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R6083-86		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	4	
R6087,88		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	2	
R6089,90		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6091		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6092,93		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	2	
R6094		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6096		ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R6097,98		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6099		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R6100		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6101		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6102,03		ERJ6GMYJ272	M.RESISTOR CH1/10W 2.7K	2	
R6104		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
R6106,07		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R6108		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6109		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R6110		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6112		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R6115		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6117		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6119,20		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R6122		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6123		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R6124		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R6125		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R7201		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R7202		ERDS2TJ105	C.RESISTOR 1/4W 1M	1	
R7203		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7204		ERDS2TJ472	C.RESISTOR 1/4W 4.7K	1	
R7205		ERDS2TJ102	C.RESISTOR 1/4W 1K	1	
R7206		ERDS2TJ824	C.RESISTOR 1/4W 820K	1	
R7403		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R7405,06		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R7410-12		ERJ6GMYJ221	M.RESISTOR CH1/10W 220	3	
R7413-19		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	7	
R7420		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R7421-23		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	3	
R7651		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	1	
R7654		ERJ6GEYJ562	M.RESISTOR CH1/10W 5.6K	1	
R7655		ERJ6GEYJ472	M.RESISTOR CH1/10W 4.7K	1	
R7656		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7657		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R7658		ERJ6GEYJ393	M.RESISTOR CH1/10W 39K	1	
R7659		ERJ6GEYJ822	M.RESISTOR CH1/10W 8.2K	1	
R7661		ERJ6GEYJ562	M.RESISTOR CH1/10W 5.6K	1	
R7662		ERJ6GEYJ393	M.RESISTOR CH1/10W 39K	1	
R7663		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R7664		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	1	
R7671,72		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	2	
R7673		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R7674		ERJ6GEYF124	M.RESISTOR CH1/10W 120K	1	
R7675		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7676		ERG1SJ152	M.RESISTOR 1W 1.5K	1	
R7677		ERDS2TJ103	C.RESISTOR 1/4W 10K	1	
R7678		ERJ6GEYJ223	M.RESISTOR CH1/10W 22K	1	
R7679		ERDS2TJ100	C.RESISTOR 1/4W 10	1	
R7680		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7681,82		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	2	
R7683		ERJ6GEYJ563	M.RESISTOR CH1/10W 56K	1	
R7684		ERJ6GEYJ393	M.RESISTOR CH1/10W 39K	1	
R7691		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7692		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R7693		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	1	
R7694		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7695		ERJ6GEYJ562	M.RESISTOR CH1/10W 5.6K	1	
R7696		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7901		ERJ3GEYJ471	M.RESISTOR CH1/16W 470	1	
R7902		ERJ3GEYJ821	M.RESISTOR CH1/16W 820	1	
R7903		ERJ3GEYJ472	M.RESISTOR CH1/16W 4.7K	1	
R7904		ERJ6GEYJ152	M.RESISTOR CH1/10W 1.5K	1	
R7905		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	1	
R7906		ERJ6GEYJ150	M.RESISTOR CH1/10W 15	1	
R7907		ERJ6GEYJ561	M.RESISTOR CH1/10W 560	1	
R7908		ERJ6GEYJ152	M.RESISTOR CH1/10W 1.5K	1	
R7909-11		ERJ6GEYJ331	M.RESISTOR CH1/10W 330	3	
R7913-15		ERJ3GEYJ682	M.RESISTOR CH1/16W 6.8K	3	
R7917		ERJ3GEYJ103	M.RESISTOR CH1/16W 10K	1	
R7918-21		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	4	
R7922		ERJ3GEYJ563	M.RESISTOR CH1/16W 56K	1	
R7923		ERJ3GEYJ394	M.RESISTOR CH1/16W 390K	1	
R7924-26		ERJ3GEYJ103	M.RESISTOR CH1/16W 10K	3	
R7927		ERJ3GEYJ562	M.RESISTOR CH1/16W 5.6K	1	
R7928		ERJ3GEYJ102	M.RESISTOR CH1/16W 1K	1	
R7929		ERJ3GEYJ563	M.RESISTOR CH1/16W 56K	1	
R7930		ERJ3GEYJ394	M.RESISTOR CH1/16W 390K	1	
R7931-33		ERJ3GEYJ103	M.RESISTOR CH1/16W 10K	3	
R7934		ERJ3GEYJ562	M.RESISTOR CH1/16W 5.6K	1	
R7935		ERJ3GEYJ102	M.RESISTOR CH1/16W 1K	1	
R7936		ERJ3GEYJ223	M.RESISTOR CH1/16W 22K	1	
R7937		ERJ3GEYJ393	M.RESISTOR CH1/16W 39K	1	
R7938		ERJ3GEYJ222	M.RESISTOR CH1/16W 2.2K	1	
R7939		ERJ3GEYJ224	M.RESISTOR CH1/16W 220K	1	
R7940		ERJ3GEYJ181	M.RESISTOR CH1/16W 180	1	
R7941		ERJ3GEYJ681	M.RESISTOR CH1/16W 680	1	
R7942		ERJ3GEYJ393	M.RESISTOR CH1/16W 39K	1	
R7943		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	1	
R7944		ERJ3GEYJ392	M.RESISTOR CH1/16W 3.9K	1	
R7945		ERJ3GEYJ822	M.RESISTOR CH1/16W 8.2K	1	
R7946,47		ERJ3GEYJ473	M.RESISTOR CH1/16W 47K	2	
R7948		ERJ3GEYJ332	M.RESISTOR CH1/16W 3.3K	1	
R7949		ERJ3GEYJ822	M.RESISTOR CH1/16W 8.2K	1	
R7950		ERJ3GEYJ332	M.RESISTOR CH1/16W 3.3K	1	
R7951		ERJ3GEYJ822	M.RESISTOR CH1/16W 8.2K	1	
R7956		ERJ3GEYJ822	M.RESISTOR CH1/16W 8.2K	1	
R7957		ERJ3GEYJ332	M.RESISTOR CH1/16W 3.3K	1	
R7958,59		ERJ3GEYJ823	M.RESISTOR CH1/16W 82K	2	
R7960,61		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	2	
R7962,63		ERJ3GEYJ101	M.RESISTOR CH1/16W 100	2	
R7964		ERJ3GEYJ272	M.RESISTOR CH1/16W 2.7K	1	
R7969-72		ERJ3GEYJ101	M.RESISTOR CH1/16W 100	4	
R7973-77		ERJ3GEYJ103	M.RESISTOR CH1/16W 10K	5	
R7978		ERJ3GEYJ104	M.RESISTOR CH1/16W 100K	1	
R7979		ERJ3GEYJ152	M.RESISTOR CH1/16W 1.5K	1	
R7980		ERJ3GEYJ104	M.RESISTOR CH1/16W 100K	1	
R7981,82		ERJ3GEYJ102	M.RESISTOR CH1/16W 1K	2	
R7983		ERJ3GEYJ103	M.RESISTOR CH1/16W 10K	1	
R7985		ERJ3GEYJ181	M.RESISTOR CH1/16W 180	1	
R7987		ERJ3GEYJ563	M.RESISTOR CH1/16W 56K	1	
R7988		ERJ3GEYJ121	M.RESISTOR CH1/16W 120	1	
R7989		ERDS2TJ823	C.RESISTOR 1/4W 82K	1	
RX3401		EXBF8E102J	RESISTOR-RESISTOR	1	
SW3901		VSS0385	SWITCH	1	<R>
T703		EIV5EC045A	TRANSFORMER	1	
T704		EIV5EC047A	TRANSFORMER	1	
T711		EIS5EC008A	TRANSFORMER	1	
T4701		VLT0695	TRANSFORMER	1	
T4702		VLT0696	TRANSFORMER	1	
TR		VJS3481	CONNECTOR (FEMALE)	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
VR301		EVN49CA00B23	V.RESISTOR 2K	1	
VR302		EVN49CA00B13	V.RESISTOR 1K	1	
VR303		EVNCBAA00B13	V.RESISTOR 1K	1	
VR304		EVN49CA00B13	V.RESISTOR 1K	1	
VR701		EVNCBAA00B53	V.RESISTOR 5K	1	
VR751		EVNCBAA00B53	V.RESISTOR 5K	1	
VR801,02		EVMEASA00B13	V.RESISTOR 1K	2	
VR803		EVMEASA00B14	V.RESISTOR 10K	1	
VR804		EVN49CA00B53	V.RESISTOR 5K	1	
VR2001-05		EVNCYAA03B54	V.RESISTOR 50K	5	
VR3001-03		EVNCYAA03B23	V.RESISTOR 2K	3	
VR3301		EVMEASA00B24	V.RESISTOR 20K	1	
VR3302		EVN49CA00B54	V.RESISTOR 50K	1	
VR3304,05		EVN49CA00B52	V.RESISTOR 0.5K	2	
VR3307		EVN49CA00B54	V.RESISTOR 50K	1	
VR3901		EVMEASA00B24	V.RESISTOR 20K	1	
VR4002		EVNCYAA03B25	V.RESISTOR 200K	1	
VR4501		EVMECSA00B53	V.RESISTOR 5K	1	
VR4502		EVMEASA00BY4	V.RESISTOR	1	
VR4507		EVMEASA00BY4	V.RESISTOR	1	
VR4509		EVMECSA00BY3	V.RESISTOR	1	
VR4512		EVNCBAA00B52	V.RESISTOR 0.5K	1	
VR4550		EVMECSA00B14	V.RESISTOR 10K	1	
VR4551,52		EVMEASA00B55	V.RESISTOR 500K	2	
VR7660		EVNCBAA00B23	V.RESISTOR 2K	1	
VR7901,02		EVNCBAA00B14	V.RESISTOR 10K	2	
VR7903		EVTEASA00B55	V.RESISTOR 500K	1	
W31		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W32		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W33		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W100		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W101		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W101		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W101		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W102		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W102		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W103		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W103		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W104		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W104		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W105		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W105		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W106		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W106		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W107		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W107		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W108		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W108		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W109		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W109		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W110		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W110		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W111		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W111		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W112		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W112		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W113		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W113		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W114		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W114		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W115		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W115,16		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
W116		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W117		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W117		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W118		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W118		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W119		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
W119		ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
W120		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q9026,27	MSB709	TRANSISTOR	2	<R>
Q9501,02	MSC2295	TRANSISTOR	2	<R>
Q9503	MSB709	TRANSISTOR	1	<R>
Q9504	MSD601	TRANSISTOR	1	<R>
Q9505	MSB709	TRANSISTOR	1	<R>
Q9506	MSD601	TRANSISTOR	1	<R>
Q9507	MSB709	TRANSISTOR	1	<R>
QR9001	MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR9004	MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR9007	MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR9010	MRN1404	TRANSISTOR-RESISTOR	1	<R>
		RESISTORS		
R9001-04	ERJ6GMYJ101	M.RESISTOR CH1/10W 100	4	
R9005	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R9006	ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R9007,08	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R9009	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R9010-17	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	8	
R9021-23	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	3	
R9024	ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R9027-29	ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	3	
R9030	ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	1	
R9031	ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R9032	ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R9037	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R9038	ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R9039	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R9040	ERJ6GMYJ681	M.RESISTOR CH1/10W 680	1	
R9041	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R9042	ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	1	
R9043	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R9044	ERJ6GMYJ681	M.RESISTOR CH1/10W 680	1	
R9045	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R9046	ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R9047,48	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R9049	ERJ6GMYJ683	M.RESISTOR CH1/10W 68K	1	
R9050	ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R9051,52	ERJ6GMYJ683	M.RESISTOR CH1/10W 68K	2	
R9053	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R9054,55	ERJ6GMYJ683	M.RESISTOR CH1/10W 68K	2	
R9056	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R9057	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R9058	ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	1	
R9059,60	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R9061	ERJ6GMYJ681	M.RESISTOR CH1/10W 680	1	
R9062	ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R9063	ERJ6GMYJ202	M.RESISTOR CH1/10W 2K	1	
R9064	ERJ6GMYJ132	M.RESISTOR CH1/10W 1.3K	1	
R9065	ERJ6GMYJ432	M.RESISTOR CH1/10W 4.3K	1	
R9066	ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	1	
R9067	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R9068-70	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	3	
R9071	ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R9072	ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R9073	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R9074	ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R9075	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R9076	ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R9077	ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R9078	ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R9079	ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R9080,81	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R9082	ERJ6GMYJ561	M.RESISTOR CH1/10W 560	1	
R9084	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R9087	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R9088	ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R9093	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R9094	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R9095	ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R9096	ERJ6GMYJ123	M.RESISTOR CH1/10W 12K	1	
R9097	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R9098	ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R9099	ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R9100,01	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	2	
R9104	ERJ6GMYJ222	M.RESISTOR CH1/10W 2.2K	1	
R9105	ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	1	
R9106	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R9107	ERJ6GMYJ392	M.RESISTOR CH1/10W 3.9K	1	
R9108,09	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	2	
R9501,02	ERJ6GMYJ223	M.RESISTOR CH1/10W 22K	2	
R9503,04	ERJ6GMYJ221	M.RESISTOR CH1/10W 220	2	
R9505	ERJ6GMYJ105	M.RESISTOR CH1/10W 1M	1	
R9506	ERJ6GMYJ224	M.RESISTOR CH1/10W 220K	1	
R9507	ERJ6GMYJ681	M.RESISTOR CH1/10W 680	1	
R9508	ERJ6GMYJ471	M.RESISTOR CH1/10W 470	1	
R9509-13	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	5	
R9514,15	ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	2	
R9516	ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R9517,18	ERJ6GMYJ472	M.RESISTOR CH1/10W 4.7K	2	
R9519	ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R9520	ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
VR9001	EVMF6SA00B23	V.RESISTOR 2K	1	
VR9002	EVNCYAA03B54	V.RESISTOR 500K	1	
VR9003	EVMF6SA00B13	V.RESISTOR 1K	1	
VR9004	EVNCYAA03B24	V.RESISTOR 20K	1	
VR9005,06	EVMF6SA00B14	V.RESISTOR 10K	2	
VR9007	EVMF6SA00B13	V.RESISTOR 1K	1	
VR9501	EVMF6SA00B23	V.RESISTOR 2K	1	
X9002	VSX0617	CRYSTAL OSCILLATOR	1	<R>
X9501	VSX0323	CRYSTAL OSCILLATOR	1	<R>
		MISCELLANEOUS		
	VSC4116	SHIELD CASE (MAIN)	1	
	VSC3620	SHIELD CASE (BOTTOM)	1	
	VSC3618	SHIELD CASE (TOP)	1	
	XTN3+6F	SCREW	4	
	VMX1921	SPACER	1	
	VEP03A63A	P.C.BOARD W/COMPONENT		
		VITC		
		CAPACITORS		
C3801	ECEA1CKN100	E.CAPACITOR 16V 10U	1	
C3802	ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
C3803	ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3804	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3805	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3806	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3807	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3808,09	ECEA1CKA100	E.CAPACITOR 16V 10U	2	
C3810	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3811	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C3812	ECEA1HKN010	E.CAPACITOR 50V 1U	1	
C3813	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3814	ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3815	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C3816		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C3817		ECEA1HKA010	E.CAPACITOR 50V 1U	1	
C3818		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
C3819,20		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	2	
C3821		ECWM1H682JZ	F.CAPACITOR 50V 6800P	1	
C3822		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C3823		ECEA1AKA330	E.CAPACITOR 10V 33U	1	
C3824		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C3825		ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C3826		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3827		ECEA1CKA100	E.CAPACITOR 16V 10U	1	
C3828		ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C3829		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C3830		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C3831		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C3832		ECEA1EKA4R7	E.CAPACITOR 25V 4.7U	1	
C3833		ECEA0JKA101	E.CAPACITOR 6.3V 100U	1	
D3801		1SS254	DIODE	1	<R>
IC3801		MN1870824H3A	IC	1	<R>
IC3802		PST7043	IC	1	<R>
IC3803		BA7062F	IC	1	<R>
IC3804		NJM2235MA	IC	1	<R>
IC3805		UPC311G2	IC	1	<R>
IC3806		AN3916	IC	1	<R>
IC3807		UPC393G2	IC	1	<R>
K3801,02		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
K3804		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L3801,02		ELESE101KA	COIL 100UH	2	
L3803		ELESE221KA	COIL 220UH	1	
P3801		VJP1393T	CONNECTOR (MALE)	1	
Q3801,02		MSD601	TRANSISTOR	2	<R>
			RESISTORS		
R3801		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R3802		ERJ6GEYG123	M.RESISTOR CH1/10W 12K	1	
R3803,04		ERJ6GEYG103	M.RESISTOR CH1/10W 10K	2	
R3805		ERJ6GEYG153	M.RESISTOR CH1/10W 15K	1	
R3806		ERJ6GEYG242	M.RESISTOR CH1/10W 2.4K	1	
R3807		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R3808		ERJ6GEYJ334	M.RESISTOR CH1/10W 330K	1	
R3809		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	1	
R3810		ERJ6GEYJ331	M.RESISTOR CH1/10W 330	1	
R3811		ERJ6GEYJ474	M.RESISTOR CH1/10W 470K	1	
R3812		ERJ6GEYJ393	M.RESISTOR CH1/10W 39K	1	
R3813		ERJ6GEYJ474	M.RESISTOR CH1/10W 470K	1	
R3814		ERJ6GEYG134	M.RESISTOR CH1/10W 130K	1	
R3815		ERJ6GEYG821	M.RESISTOR CH1/10W 820	1	
R3816		ERJ6GEYG182	M.RESISTOR CH1/10W 1.8K	1	
R3817		ERJ6GEYG822	M.RESISTOR CH1/10W 8.2K	1	
R3818		ERJ6GEYG362	M.RESISTOR CH1/10W 3.6K	1	
R3819,20		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	2	
R3821		ERJ6GEYG102	M.RESISTOR CH1/10W 1K	1	
R3822		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R3823		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R3824		ERJ6GEYG333	M.RESISTOR CH1/10W 33K	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R3825		ERJ6GEYG103	M.RESISTOR CH1/10W 10K	1	
R3826-28		ERJ6GEYJ101	M.RESISTOR CH1/10W 100	3	
R3829-31		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	3	
R3832,33		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	2	
R3834,35		ERJ6GEYJ101	M.RESISTOR CH1/10W 100	2	
R3836		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	1	
R3837		ERJ6GEYJ472	M.RESISTOR CH1/10W 4.7K	1	
R3838		ERJ6GEYJ183	M.RESISTOR CH1/10W 18K	1	
R3839		ERJ6GEYJ123	M.RESISTOR CH1/10W 12K	1	
R3840		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
VR3801		EVMEASA00B24	V.RESISTOR 20K	1	
X3801		VSX0389	CRYSTAL OSCILLATOR	1	<R>
		VEP05176G	P.C.BOARD W/COMPONENT		
			HEAD AMP		
			CAPACITORS		
C503		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C505-08		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	4	
C509		ECUM1H332KBN	C.CAPACITOR CH 50V 3300P	1	
C510,11		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C512		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C513		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C514		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C515,16		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C517,18		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C519,20		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C521		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C523-25		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C526		VCEA0JAC221	E.CAPACITOR 6.3V 220U	1	
C527		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C531		ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C532		ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1	
C533,34		ECUM1H121JCN	C.CAPACITOR CH 50V 120P	2	
C535		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C536		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C537		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C538,39		ECUM1H680JCN	C.CAPACITOR CH 50V 68P	2	
C540		ECEA1CK470	E.CAPACITOR 16V 47U	1	
C551		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C552-54		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	3	
C555		ECEA0JPK221	E.CAPACITOR 6.3V 220U	1	
C556,57		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C559		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C560,61		ECUM1H471JCN	C.CAPACITOR CH 50V 470P	2	
C562,63		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C564		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
C565		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C566		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C567		ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C569		ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
IC501		AN3336SB	IC	1	<R>
IC502		AN3370K	IC	1	<R>
IC551		BA7743FS	IC	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
K501		VLP0145	COIL	1	
K502		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K503,04		VLP0145	COIL	2	
K505		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K506		VLP0145	COIL	1	
K552		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
L501-03		VLQ0540K330	COIL 33UH	3	
L504		VLQ0540J5R6	COIL 5.6UH	1	
L551,52		VLQ0540K330	COIL 33UH	2	
P501		VJS3537B020G	CONNECTOR (FEMALE)	1	
P502		VJS2603	CONNECTOR (FEMALE)	1	
Q501		MSB709	TRANSISTOR	1	<R>
Q502		MSD601	TRANSISTOR	1	<R>
QR501		MRN2404	TRANSISTOR-RESISTOR	1	<R>
			RESISTORS		
R501		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	1	
R502		ERJ6GEYJ152	M.RESISTOR CH1/10W 1.5K	1	
R503		ERJ6GMYG752	M.RESISTOR CH1/10W 7.5K	1	
R504		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R505		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R506		ERJ6GMYJ392	M.RESISTOR CH1/10W 3.9K	1	
R507		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R508		ERJ6GMYJ331	M.RESISTOR CH1/10W 330	1	
R509-12		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	4	
R513		ERJ6GMYJ103	M.RESISTOR CH1/10W 10K	1	
R514		ERJ6GMYJ274	M.RESISTOR CH1/10W 270K	1	
R517		ERJ6GMYJ100	M.RESISTOR CH1/10W 10	1	
R518,19		ERJ6GMYJ101	M.RESISTOR CH1/10W 100	2	
R520		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R521,22		ERJ6GMYJ822	M.RESISTOR CH1/10W 8.2K	2	
R523		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	1	
R524		VRE0034E182	M.RESISTOR CH 1/10W 1.8K	1	
R525		VRE0034E103	M.RESISTOR CH 1/10W 10K	1	
R526		ERJ6GMYG133	M.RESISTOR CH1/10W 13K	1	
R551		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R552		ERJ6GMYJ391	M.RESISTOR CH1/10W 390	1	
R553		ERJ6GMYJ273	M.RESISTOR CH1/10W 27K	1	
R554		ERJ6GMYJ243	M.RESISTOR CH1/10W 24K	1	
R556		ERJ6GMYJ333	M.RESISTOR CH1/10W 33K	1	
R557		ERJ6GMYJ182	M.RESISTOR CH1/10W 1.8K	1	
R558		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R559,60		ERJ6GMYJ152	M.RESISTOR CH1/10W 1.5K	2	
R561		ERJ6GMYJ332	M.RESISTOR CH1/10W 3.3K	1	
R562		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
R563		VRE0034E100	M.RESISTOR CH 1/10W 10	1	
R564		ERJ6GMYJ224	M.RESISTOR CH1/10W 220K	1	
R565		ERJ6GMYJ473	M.RESISTOR CH1/10W 47K	1	
R566		ERJ6GMYJ273	M.RESISTOR CH1/10W 27K	1	
R567		ERJ6GMYJ153	M.RESISTOR CH1/10W 15K	1	
R568		ERJ6GMYJ271	M.RESISTOR CH1/10W 270	1	
R569		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R570		ERJ6GMYJ102	M.RESISTOR CH1/10W 1K	1	
W105-08		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	4	
W110-14		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	5	
W115		ERJ6GMYJ101	M.RESISTOR CH 1/10W 100	1	
W116,17		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
			MISCELLANEOUS		
		VSC3714	SHIELD CASE (TOP)	1	
		VSC3478	SHIELD CASE (MAIN)	1	
		VSC3715	SHIELD CASE (BOTTOM)	1	
		VEP06926C	P.C.BOARD W/COMPONENT		
			VR		
			CAPACITORS		
C6501,02		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	2	
C6503,04		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
C6505		ECEA1HKA3R3	E.CAPACITOR 50V 3.3U	1	
C6506		VCEA1HAC3R3	E.CAPACITOR 50V 3.3U	1	
C6507		ECEA1AKA330	E.CAPACITOR 10V 33U	1	
C6508		ECEA1CKA330	E.CAPACITOR 16V 33U	1	
C6509		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C6510		ECEA0JK470	E.CAPACITOR 6.3V 47U	1	
C6511-14		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C6515,16		ECUM1H101JCN	C.CAPACITOR CH 50V 100P	2	
C6701		ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C6702		ECUM1E333KBN	C.CAPACITOR CH 25V 0.033U	1	
C6703		ECEA0JKA470	E.CAPACITOR 6.3V 47U	1	
D6701		PD410TN1	DIODE	1	<R>
IC6501		VCR0172	IC	1	<R>
IC6701		UPC2800AGR	IC	1	<R>
IR6501		VEK6407	IR RECEIVER	1	
L6501,02		ELESE471KA	COIL 470UH	2	
L6503,04		ELESE221KA	COIL 220UH	2	
L6506,07		ELESE101KA	COIL 100UH	2	
P6502		VJP1251T	CONNECTOR (MALE)	1	
PS6501,02		VJS3405A011A	CONNECTOR (FEMALE)	2	
			RESISTORS		
R6501		ERJ6GEYG332	M.RESISTOR CH1/10W 3.3K	1	
R6502		ERJ6GEYG331	M.RESISTOR CH1/10W 330	1	
R6503,04		ERJ6GEYG271	M.RESISTOR CH1/10W 270	2	
R6505		ERJ6GEYG332	M.RESISTOR CH1/10W 3.3K	1	
R6506		ERJ6GEYG331	M.RESISTOR CH1/10W 330	1	
R6508,09		ERJ6GEYJ222	M.RESISTOR CH1/10W 2.2K	2	
R6511		ERDS2TYJ470	C.RESISTOR 1/4W 47	1	
R6701		ERJ6ENF1363	M.RESISTOR CH 1/10W 0	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW6501,02		EVQ11409K	SWITCH	2	<R>
VR6501		EWAKABX15C23	V.RESISTOR 2K	1	
VR6502		EWAKFKX15B24	V.RESISTOR 20K	1	
VR6503		EWANYJX1054J	V.RESISTOR	1	
W101-07		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	7	
W109-11		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
			MISCELLANEOUS		
		VEJ1429	FRONT JACK PLATE	1	
		VYC0599	REC VR COVER UNIT	1	
		VGU4495	REC VR KNOB	2	
		VEP07739G	P.C.BOARD W/COMPONENT		AG-4700E
			TIMER		
			CAPACITORS		
C1701		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1702		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1703		ECKD2H471KB	E.CAPACITOR 500V 470P	1	
C1704		ECEA1VKA220	E.CAPACITOR 35V 22U	1	
C1705		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1706		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7501		ECRHC030E11	TRIMMER CAPACITOR	1	
C7502		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C7503		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	
C7505,06		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C7507,08		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C7509		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C7510		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7511		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7512		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7513		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7514,15		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7517		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7519-30		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	12	
C7531,32		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7533-36		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	4	
C7537		ECEA1HKA220	E.CAPACITOR 50V 22U	1	
C7538		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7539		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
D1701		MA1270-H	DIODE	1	<R>
D1702		MA185	DIODE	1	<R>
D7501		MA3075	DIODE	1	<R>
D7502-06		MA221	DIODE	5	<R>
D7510		MA221	DIODE	1	<R>
D7512		MA221	DIODE	1	<R>
D7514		MA221	DIODE	1	<R>
D7517,18		MA221	DIODE	2	<R>
D7520		MA221	DIODE	1	<R>
D7522		MA221	DIODE	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
D7526		MA221	DIODE	1	<R>
D7531,32		MA221	DIODE	2	<R>
D7534,35		MA221	DIODE	2	<R>
D7546-53		MA221	DIODE	8	<R>
D7556,57		LN81RCPHL	DIODE	2	<R>
D7559,60		LN81RCPHL	DIODE	2	<R>
D7562,63		MA221	DIODE	2	<R>
DP7501		VSL0276-B	DISPLAY TUBE	1	
IC7501		M37502V4BS	IC	1	<R>
IC7502		PST7026	IC	1	<R>
IC7503		XLJ9021B	IC	1	<R>
IC7504		PST7043	IC	1	<R>
IC7505		BA6810S	IC	1	<R>
K7502		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7504,05		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L7501		VLQEL05S101K	COIL 100UH	1	
L7502		VLQ0188J330	COIL 33UH	1	
P7501,02		VJS3537A020G	CONNECTOR (FEMALE)	2	
P7503		VJP3234B010	CONNECTOR (MALE)	1	
P7504		VJP1246T	CONNECTOR (MALE)	1	
P7505,06		VJS2183	CONNECTOR (FEMALE)	2	
PP7501,02		VJP3405A011W	CONNECTOR (MALE)	2	
Q1701		2SD1994A	TRANSISTOR	1	<R>
Q7501,02		MSD601	TRANSISTOR	2	<R>
QR7501,02		MRN2403	TRANSISTOR-RESISTOR	2	<R>
QR7503		MRN2402	TRANSISTOR-RESISTOR	1	<R>
QR7506		MRN1402	TRANSISTOR-RESISTOR	1	<R>
QR7507		MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR7508-11		MRN2404	TRANSISTOR-RESISTOR	4	<R>
QR7512-14		MRN2403	TRANSISTOR-RESISTOR	3	<R>
			RESISTORS		
R1701		ERJ6GEYJ332	M.RESISTOR .CH1/10W 3.3K	1	
R1702		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R1703		ERJ6GEYJ101	M.RESISTOR CH1/10W 100	1	
R7501,02		ERJ6GEYJ820	M.RESISTOR CH1/10W 82	2	
R7503		ERJ6GEYG223	M.RESISTOR CH1/10W 22K	1	
R7504		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7505-07		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	3	
R7508		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R7509		ERJ6GEYJ331	M.RESISTOR CH1/10W 330	1	
R7510		ERJ6GEYK106	M.RESISTOR CH1/10W 10M	1	
R7511		ERJ6GEYJ224	M.RESISTOR CH1/10W 220K	1	
R7512,13		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	2	
R7514-16		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	3	
R7517,18		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	2	
R7519-22		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	4	
R7525,26		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	2	
R7528,29		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
R7531-41		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	11	
R7542-56		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	15	
R7557-59		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	3	
R7560-62		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	3	
R7564		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R7565		ERJ6GEYJ392	M.RESISTOR CH1/10W 3.9K	1	
R7566		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R7567		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R7568		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7569		ERJ6GEYJ101	M.RESISTOR CH1/10W 100	1	
R7570		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	1	
R7571		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7572		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7573		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7574		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
RX7501,02		EXBF6E104J	RESISTOR-RESISTOR	2	
RX7503		EXBF8E104J	COMBI.R-R	1	
SW7502,03		ESD172355	SWITCH	2	<R>
SW7504-07		ESD172255	SWITCH	4	<R>
SW7508,09		ESD172355	SWITCH	2	<R>
SW7510		ESD172255	SWITCH	1	<R>
T1701		ETE13K80AY	TRANSFORMER	1	
VR4004		EVNCBAA00B53	V.RESISTOR 5K	1	
W201-34		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	34	
X7501		VSX0506	CRYSTAL OSCILLATOR	1	<R>
X7502		VSX0094	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
		VMD0504	LED HOLDER	4	
		VJF1043	FIP HOLDER	1	
		VEP07739Q	P.C.BOARD W/COMPONENT		AG-4700B
			TIMER		
			CAPACITORS		
C1701		ECEA1CKA101	E.CAPACITOR 16V 100U	1	
C1702		ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	1	
C1703		ECKD2H471KB	E.CAPACITOR 500V 470P	1	
C1704		ECEA1VKA220	E.CAPACITOR 35V 22U	1	
C1705		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1706		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7501		ECRHC030E11	TRIMMER CAPACITOR	1	
C7502		ECEA0JKS330	E.CAPACITOR 6.3V 33U	1	
C7503		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7504		ECUM1H223KBN	C.CAPACITOR CH 50V 0.022U	1	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
C7505,06		ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	2	
C7507,08		ECUM1H473ZFN	C.CAPACITOR CH 50V 0.047U	2	
C7509		ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1	
C7510		ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C7511		ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1	
C7512		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7513		ECEA0JKA221	E.CAPACITOR 6.3V 220U	1	
C7514,15		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7517		ECEA0JKS470	E.CAPACITOR 6.3V 47U	1	
C7518		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7519-30		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	12	
C7531,32		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C7533-36		ECUM1H270JCN	C.CAPACITOR CH 50V 27P	4	
C7537		ECEA1HKA220	E.CAPACITOR 50V 22U	1	
C7538		ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C7539		ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
D1701		MA1270-H	DIODE	1	<R>
D1702		MA185	DIODE	1	<R>
D7501		MA3075	DIODE	1	<R>
D7502-06		MA221	DIODE	5	<R>
D7510,11		MA221	DIODE	2	<R>
D7514		MA221	DIODE	1	<R>
D7516-18		MA221	DIODE	3	<R>
D7520-22		MA221	DIODE	3	<R>
D7526		MA221	DIODE	1	<R>
D7534		MA221	DIODE	1	<R>
D7546-53		MA221	DIODE	8	<R>
D7556-60		LN81RCPHL	DIODE	5	<R>
D7562,63		MA221	DIODE	2	<R>
DP7501		VSL0276-B	DISPLAY TUBE	1	
IC7501		M37502V4BS	IC	1	<R>
IC7502		PST7026	IC	1	<R>
IC7503		XLJ9021B	IC	1	<R>
IC7504		PST7043	IC	1	<R>
IC7505		BA6810S	IC	1	<R>
K7502		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	1	
K7504,05		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	2	
L7501		VLQEL05S101K	COIL 100UH	1	
L7502		VLQ0188J330	COIL 33UH	1	
P7501,02		VJS3537A020G	CONNECTOR (FEMALE)	2	
P7503		VJP3234B010	CONNECTOR (MALE)	1	
P7504		VJP1246T	CONNECTOR (MALE)	1	
P7505,06		VJS2183	CONNECTOR (FEMALE)	2	
PP7501,02		VJP3405A011W	CONNECTOR (MALE)	2	
Q1701		2SD1994A	TRANSISTOR	1	<R>
Q7501,02		MSD601	TRANSISTOR	2	<R>
QR7501,02		MRN2403	TRANSISTOR-RESISTOR	2	<R>
QR7503		MRN2402	TRANSISTOR-RESISTOR	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
QR7506		MRN1402	TRANSISTOR-RESISTOR	1	<R>
QR7507		MRN1404	TRANSISTOR-RESISTOR	1	<R>
QR7508-11		MRN2404	TRANSISTOR-RESISTOR	4	<R>
QR7512-14		MRN2403	TRANSISTOR-RESISTOR	3	<R>
			RESISTORS		
R1701		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	1	
R1702		ERDS2TJ101	C.RESISTOR 1/4W 100	1	
R1703		ERJ6GEYJ101	M.RESISTOR CH1/10W 100	1	
R7501,02		ERJ6GEYJ820	M.RESISTOR CH1/10W 82	2	
R7503		ERJ6GEYG223	M.RESISTOR CH1/10W 22K	1	
R7504		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7505-07		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	3	
R7508		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R7509		ERJ6GEYJ331	M.RESISTOR CH1/10W 330	1	
R7510		ERJ6GEYK106	M.RESISTOR CH1/10W 10M	1	
R7511		ERJ6GEYJ224	M.RESISTOR CH1/10W 220K	1	
R7512,13		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	2	
R7514-16		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	3	
R7517,18		ERJ6GEYJ473	M.RESISTOR CH1/10W 47K	2	
R7519-22		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	4	
R7525,26		ERJ6GEYJ471	M.RESISTOR CH1/10W 470	2	
R7527-29		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	3	
R7531-41		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	11	
R7542-56		ERJ6GEYJ332	M.RESISTOR CH1/10W 3.3K	15	
R7557-59		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	3	
R7560-62		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	3	
R7564		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R7565		ERJ6GEYJ392	M.RESISTOR CH1/10W 3.9K	1	
R7566		ERJ6GEYJ104	M.RESISTOR CH1/10W 100K	1	
R7567		ERJ6GEYJ272	M.RESISTOR CH1/10W 2.7K	1	
R7568		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7569		ERJ6GEYJ101	M.RESISTOR CH1/10W 100	1	
R7570		ERJ6GEYJ681	M.RESISTOR CH1/10W 680	1	
R7571		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7572		ERJ6GEYJ102	M.RESISTOR CH1/10W 1K	1	
R7573		ERJ6GEYJ103	M.RESISTOR CH1/10W 10K	1	
R7574		ERJ6GEYJ221	M.RESISTOR CH1/10W 220	1	
RX7501,02		EXBF6E104J	RESISTOR-RESISTOR	2	
RX7503		EXBF8E104J	COMBI.R-R	1	
SW7501		ESD172255	SWITCH	1	<R>
SW7502,03		ESD172355	SWITCH	2	<R>
SW7504-07		ESD172255	SWITCH	4	<R>
SW7508,09		ESD172355	SWITCH	2	<R>
SW7510		ESD172255	SWITCH	1	<R>
T1701		ETE13K80AY	TRANSFORMER	1	
VR4004		EVNCBAA00B53	V.RESISTOR 5K	1	
W201-34		ERJ6GMZ0R00	M.RESISTOR CH 1/10W 0	34	
X7501		VSX0506	CRYSTAL OSCILLATOR	1	<R>
X7502		VSX0094	CRYSTAL OSCILLATOR	1	<R>
			MISCELLANEOUS		
		VMD0504	LED HOLDER	5	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
		VJF1043	FIP HOLDER	1	
		VEP01558C	P.C.BOARD W/COMPONENT		
			POWER		
			CAPACITORS		
C1103		VCC0021	C.CAPACITOR	1	<!>
C1106		VCC0021	C.CAPACITOR	1	<!>
C1109		VCC0023	C.CAPACITOR	1	<!>
C1110		ECQU2A224MN	P.CAPACITOR 250V 0.22U	1	<!>
C1111		ECQU2A154MNB	P.CAPACITOR 250V 0.15U	1	<!>
C1112		ECEC2GG680	E.CAPACITOR 400V 68U	1	
C1113		ECQE6473KF	P.CAPACITOR 50V	1	
C1114		VCK0106K121	C.CAPACITOR	1	
C1115		ECA1VXLV470	E.CAPACITOR 35V 47U	1	
C1116		ECA1CXLV101	E.CAPACITOR 16V 100U	1	
C1117		ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C1118		ECKF1H271KB	C.CAPACITOR 50V 270P	1	
C1121		ECCD2H101J	C.CAPACITOR 500V 100P	1	
C1123		ECEA1JFE560	E.CAPACITOR 56U	1	
C1124		ECEA1CFE331	E.CAPACITOR 16V 330U	1	
C1125		ECEA1DFZ681	E.CAPACITOR 680U	1	
C1126		ECEA1AFZ681	E.CAPACITOR 10V 680U	1	
C1127		ECEA1JFE470	E.CAPACITOR 47U	1	
C1128		ECEA1CFE121	E.CAPACITOR 16V 120U	1	
C1129		ECEA1DFZ681	E.CAPACITOR 680U	1	
C1130		ECEA1AFZ681	E.CAPACITOR 10V 680U	1	
C1131-34		ECKF1H102ZF	C.CAPACITOR 50V 1000P	4	
C1135,36		ECA1CGE101X	E.CAPACITOR 16V 100U	2	
C1139		ECKF1H103ZF	C.CAPACITOR 50V 0.01U	1	
C1140,41		ECA1CGE101X	E.CAPACITOR 16V 100U	2	
D1102		EM1B	DIODE	1	<R><!>
D1103		AP01C	DIODE	1	<R>
D1104		MA178	DIODE	1	<R>
D1105		1SS254	DIODE	1	<R>
D1106		MA4200H	DIODE	1	<R>
D1107		MA723VT	DIODE	1	<R>
D1108		10ELS2	DIODE	1	<R>
D1109		MA185	DIODE	1	<R>
D1110		FMLG12SP	DIODE	1	<R>
D1111		FMBG14L	DIODE	1	<R>
D1112		SV03YS	DIODE	1	<R>
D1115-17		EM1B	DIODE	3	<R>
D1118		MA4056-L	DIODE	1	<R>
D1119		1SS254	DIODE	1	<R>
D1120		MA4120-H	DIODE	1	<R>
D1121,22		1SS254	DIODE	2	<R>
IC1101		STRM6547LF	IC	1	<R><!>
IC1103		SI3120C	IC	1	<R>
IC1104		SI-3050CA	IC	1	<R>
L1101,02		ELF18D221F	COIL 220UH	2	<!>
L1107-09		EXCELSA35	COIL	3	
L1110		VLP0074	COIL	1	
L1111,12		ELESE101KA	COIL 100UH	2	
L1113,14		ELC07B009	COIL	2	
L1115,16		VLP0083	COIL	2	

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
P1101		VJS2625	CONNECTOR (FEMALE)	1	<!>
P1102		VJP1930T	CONNECTOR (MALE)	1	
P1103		VJP1149	CONNECTOR (MALE)	1	
Q1101		PC120FY	TRANSISTOR	1	<R><!>
Q1102		2SD1996-R	TRANSISTOR	1	<R>
			RESISTORS		
R1101		ERC12AGM334	S.RESISTOR 1/2W 330K	1	<!>
R1102		VRE0087	M.RESISTOR	1	
R1103		ERG3SJ823	M.RESISTOR 3W 82K	1	
R1104,05		ERDS2FJ224	C.RESISTOR 1/4W 220K	2	
R1106		ERDS2FJ221	C.RESISTOR 1/4W 220	1	
R1109		ERDS2FJ561	C.RESISTOR 1/4W 560	1	
R1110		ERDS2FJ391	C.RESISTOR 1/4W 390	1	
R1111		ERX1SJ1R5	M.RESISTOR 1W 1.5	1	
R1112		ERDS2FJ103	C.RESISTOR 1/4W 10K	1	
R1113		ERDS2FJ682	C.RESISTOR 1/4W 6.8K	1	
R1114		ERDS2FJ101	C.RESISTOR 1/4W 100	1	
R1115		ERDS2TJ271	C.RESISTOR 1/4W 270	1	
R1122		EROS2CKG62R0	M.RESISTOR 1/4W 62.0	1	
R1123		EROS2CKG3001	M.RESISTOR 1/4W 3K	1	
R1124		EROS2CKG20R0	M.RESISTOR 1/4W 20.0	1	
R1125		EROS2CKG1201	M.RESISTOR 1/4W 1.2K	1	
R1126		ERDS1TJ562	C.RESISTOR 1/2W 5.6K	1	
R1127		ERDS2FJ224	C.RESISTOR 1/4W 220K	1	
T1101		VLT0718	TRANSFORMER	1	
			MISCELLANEOUS		
		VJF0318	FUSE HOLDER	2	<!>
		VMZ2212	CAPACITOR COVER	3	<!>
		VEP00T87A	P.C.BOARD W/COMPONENT		
			MECHANISM CONNECTION		
D1501		LN59L.VT	DIODE	1	<R>
IC1501,02		0N1387	IC	2	<R>
P1503		VJS3316A002	CONNECTOR (FEMALE)	1	
P1504		VJS3317A004	CONNECTOR (FEMALE)	1	
P1505		VJS3537B014G	CONNECTOR (FEMALE)	1	
Q1501		PT493F1MN	TRANSISTOR	1	<R>
Q1502		PN205L-NC.VT	TRANSISTOR	1	<R>

Ref.No.		Part No.	Part Name & Description	Pcs	Remarks
SW1501		VES0695	SWITCH	1	<R>
SW1502		VST0176	SWITCH	1	<R>
			MISCELLANEOUS		
		VMD2029	REEL GUIDE	1	